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The Architects' JOURNAL for March 27, 1958

THE ARCHITECTS' JOURNAL

standard contents

every issue does not necessarily contain all these contents, but they are the regular features which continually recur

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No. 3291] [Vol. 127

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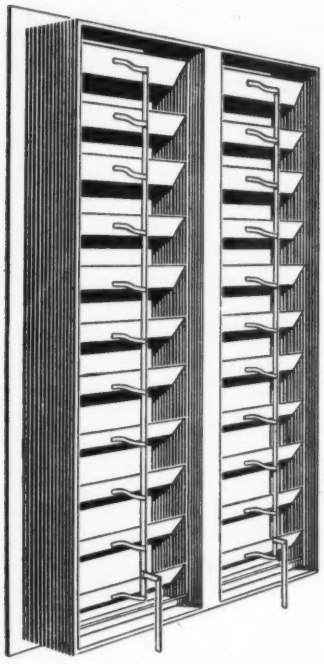
★ A glossary of abbreviations of Government Departments and Societies and Committees of all kinds, together with their full address and telephone numbers. The glossary is published in two parts—A to Ig one week, Ih to Z the next. In all cases where the town is not mentioned the word LONDON is implicit in the address.

AA	Architectural Association, 34/6, Bedford Square, W.C.1.	Museum 0974
AAI	Association of Art Institutions. Secy.: W. L. Stevenson, College of Art, Hope Street, Liverpool 1.	Royal 1826
ABS	Architects' Benevolent Society. 66, Portland Place, W.1.	Langham 5721
ABT	Association of Building Technicians. 1, Ashley Place, S.W.1.	Victoria 0447–8
ACGB	Arts Council of Great Britain. 4, St. James' Square, S.W.1.	Whitehall 9737
ADA	Aluminium Development Association. 33, Grosvenor Street, W.1.	Mayfair 7501/8
ARCUK	Architects' Registration Council. 78, Wimpole Street, W.1.	Welbeck 2915
BAE	Board of Architectural Education. 66, Portland Place, W.1.	Langham 5721
BC	Building Centre. 26, Store Street, Tottenham Court Road, W.C.1.	Museum 5400
BCC	British Colour Council. 13, Portman Square, W.1.	Welbeck 4185
BCCF	British Cast Concrete Federation. 105, Uxbridge Road, Ealing, W.5.	Ealing 9621
BCIRA	British Cast Iron Research Association. Alvechurch, Birmingham.	Redditch 716
BDA	British Door Association. 10, The Boltons, S.W.10.	Fremantle 8494
BEDA	British Electrical Development Association. 2, Savoy Hill, W.C.2.	Temple Bar 9434
BIA	British Ironfounders' Association. 145, Vincent Street, Glasgow, C.2.	Glasgow Central 2891
BID	Building Industries Distributors. 52, High Holborn, W.C.1.	Chancery 7772
BINC	Building Industries National Council. 11, Weymouth Street, W.1.	Langham 2785
BOT	Board of Trade. Whitehall Gardens, Horseguards' Avenue, Whitehall, S.W.1.	Trafalgar 8855
BRS	Building Research Station. Bucknalls Lane, Watford.	Garston 4040
BSA	Building Societies Association. 14, Park Street, W.1.	Mayfair 0515
BSI	British Standards Institution. British Standards House, 2, Park St., W.1.	Mayfair 9000
BTE	Building Trades Exhibition. 32, Millbank, S.W.1.	Tate Gallery 8134
CABAS	City and Borough Architects Society. C/o Johnson Blackett, F.R.I.B.A., Civic Centre, Newport, Mon.	Newport 65491
CAS	County Architects' Society. C/o S. Vincent Goodman, F.R.I.B.A., Shire Hall, Bedford.	Bedford 67444
CCA	Cement and Concrete Association. 52, Grosvenor Gardens, S.W.1.	Belgravia 6661
CCP	Council for Codes of Practice. Lambeth Bridge House, S.E.1.	Reliance 7611 Ext. 1284
CDA	Copper Development Association. 55, South Audley Street, W.1.	Grosvenor 8811
CIAM	Congrès Internationaux d'Architecture Moderne. Doldertal, 7, Zurich, Switzerland	
COID	Council of Industrial Design. 28, Haymarket, S.W.1.	Trafalgar 8000
CPRE	Council for the Preservation of Rural England. 4, Hobart Place, S.W.1.	Sloane 4280
CUC	Coal Utilization Council. 3, Upper Belgrave Street, S.W.1.	Sloane 9116
CVE	Council for Visual Education. 13, Suffolk Street, Haymarket, S.W.1.	Reading 72255
DGW	Directorate General of Works, Ministry of Works, Lambeth Bridge House, S.E.1.	Reliance 7611
DIA	Design and Industries Association. 13, Suffolk Street, S.W.1.	Whitehall 0540
DOT	Department of Overseas Trade. Horseguards Avenue, Whitehall, S.W.1.	Trafalgar 8855
EJMA	English Joinery Manufacturers' Association (Incorporated). Sackville House, 40, Piccadilly, W.1.	Regent 4448
EPNS	English Place-Name Society. 7, Selwyn Gardens, Cambridge.	
FAS	Faculty of Architects and Surveyors. 68, Gloucester Place, W.1.	Welbeck 9966
FASS	Federation of Associations of Specialists and Sub-Contractors, 14, Bryanston Street, W.1.	Welbeck 1781
FBBDO	Fibre Building Board Development Organization Ltd. (Fidor), 47, Princes Gate, Kensington, S.W.7.	Kensington 4577
FBI	Federation of British Industries. 21, Tothill Street, S.W.1.	Whitehall 6711
FC	Forestry Commission. 25, Savile Row, W.1.	Regent 0221
FCMI	Federation of Coated Macadam Industries. 37, Chester Square, S.W.1.	Sloane 1002
FDMA	The Flush Door Manufacturers Association Ltd., Trowell, Nottingham.	Ilkeston 623
FLD	Friends of the Lake District. Pennington House, nr. Ulverston, Lancs.	Ulverston 201
FMB	Federation of Master Builders. 26, Great Ormond Street, Holborn, W.C.1.	Chancery 7583
FPC	The Federation of Painting Contractors, St. Stephen's House, S.W.1.	Whitehall 3902
FRHB	Federation of Registered House Builders. 82, New Cavendish Street, W.1.	Langham 4341
GPDA	Gypsum Plasterboard Development Association. 11, Ironmonger Lane, E.C.2.	Monarch 8888
GC	Gas Council. 1, Grosvenor Place, S.W.1.	Sloane 4554
GG	Georgian Group. 2, Chester Street, S.W.1.	Belgravia 3081
HC	Housing Centre. 13, Suffolk Street, Pall Mall, S.W.1.	Whitehall 2881
IAAS	Incorporated Association of Architects and Surveyors. 29, Belgrave Square, S.W.1.	Belgravia 3755
ICA	Institute of Contemporary Arts. 17-18, Dover Street, Piccadilly, W.1.	Grosvenor 6186
ICE	Institution of Civil Engineers. 1, Great George Street, S.W.1.	Whitehall 4577
IEE	Institution of Electrical Engineers. Savoy Place, Victoria Embankment, W.C.2.	Temple Bar 7676
IES	Illuminating Engineering Society. 32, Victoria Street, S.W.1.	Abbey 5215
IGE	Institution of Gas Engineers. 17, Grosvenor Crescent, S.W.1.	Sloane 8266



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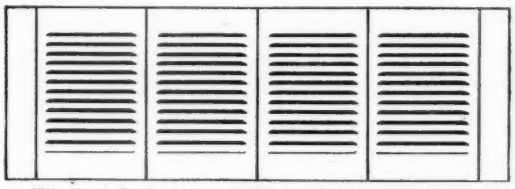
(Right) *Type LH 'Maxaire' Multi-louvred Panel with ¾" flange.*



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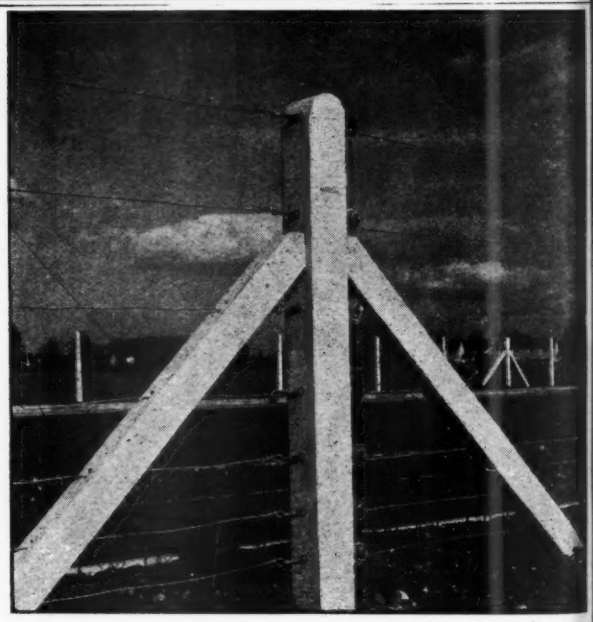

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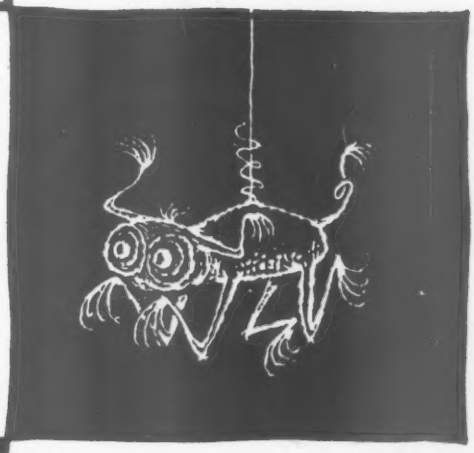

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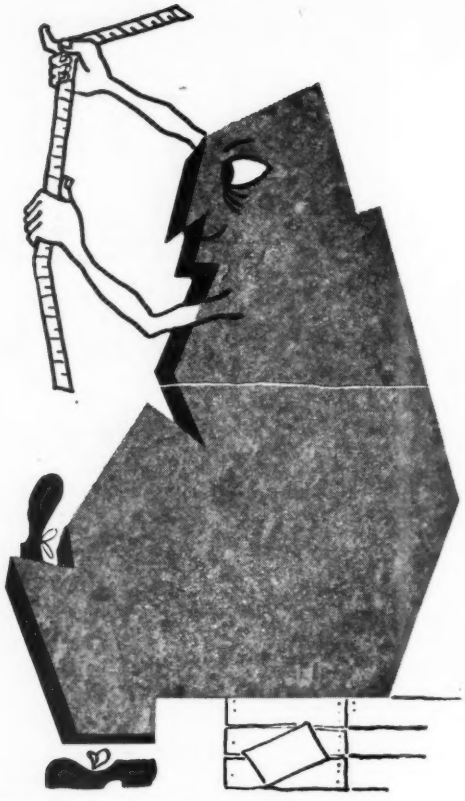

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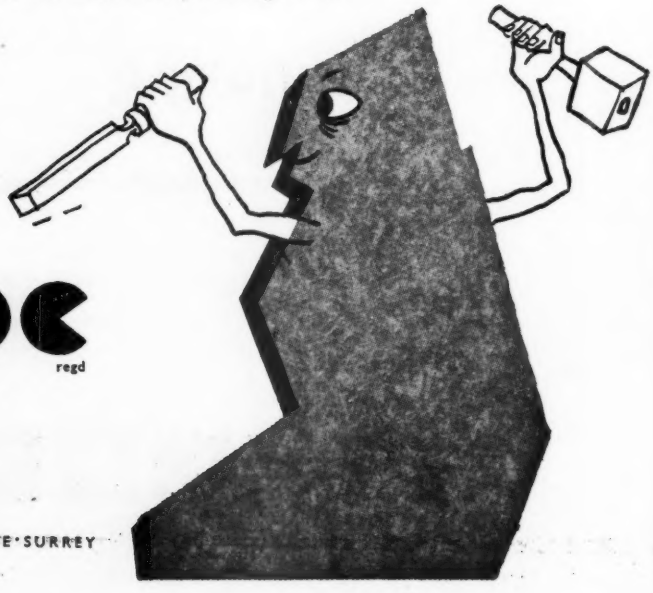

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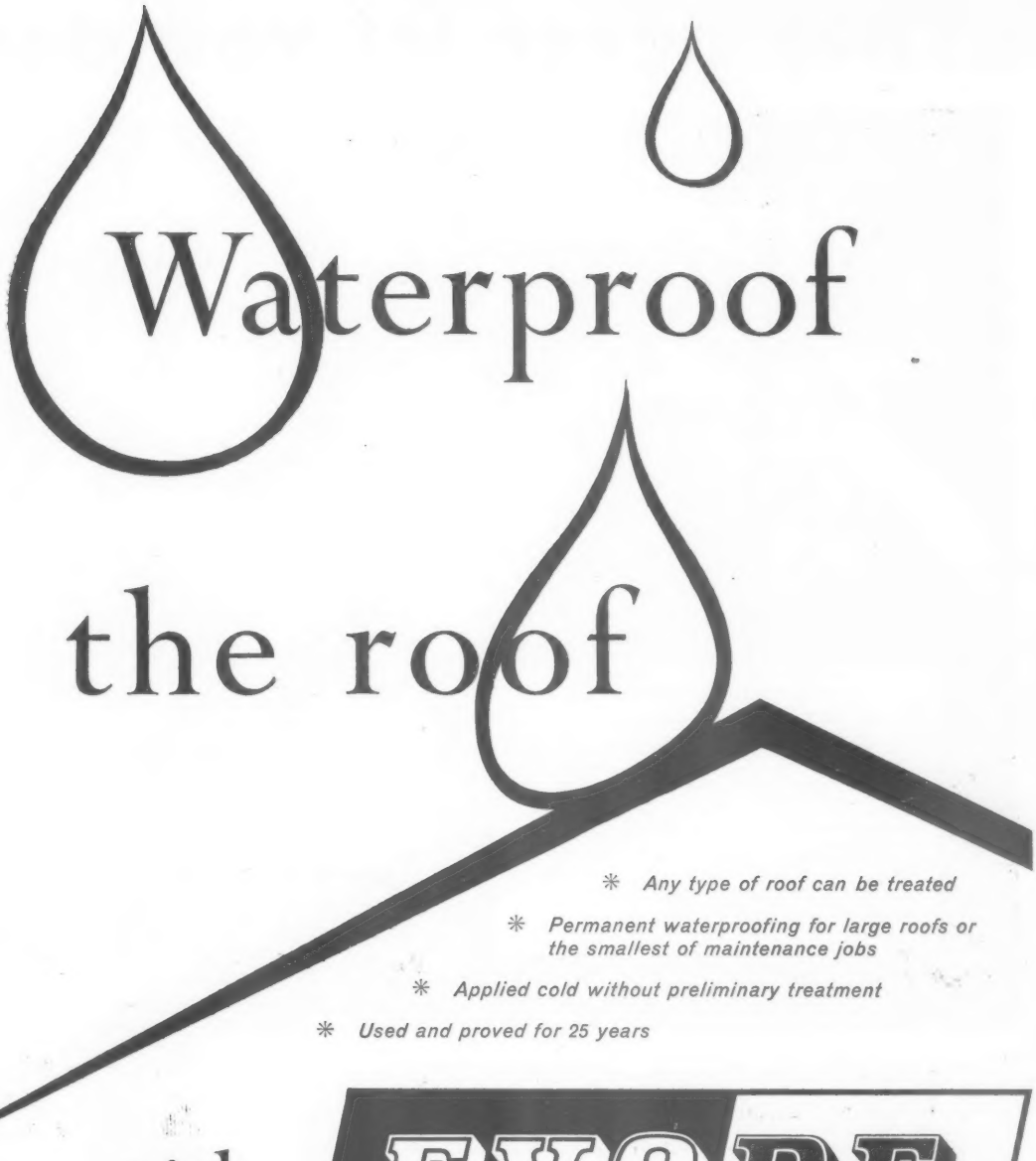

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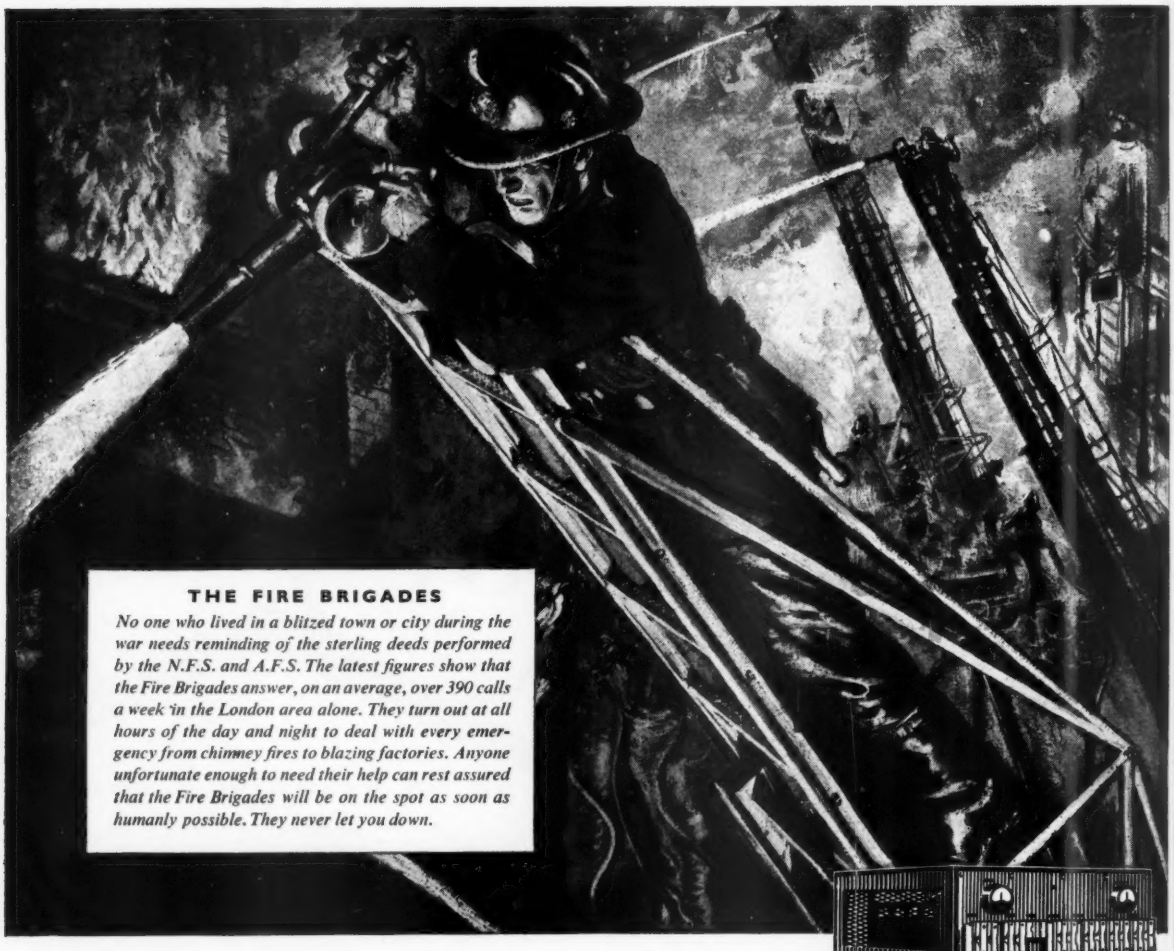

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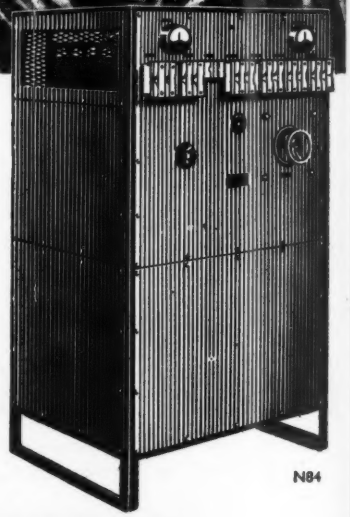

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ditto	1 ,, ,, to 2 ,, ,,	8 ,, ,, ,,	60 mins.
ditto	1 ,, ,, to 4 ,, ,,	4¾ ,, ,, ,,	2 hrs.
ditto	1 ,, ,, to 8 ,, ,,	2¾ ,, ,, ,,	4 hrs.
ditto	1 ,, ,, to 10 ,, ,,	2¼ ,, ,, ,,	7 hrs.

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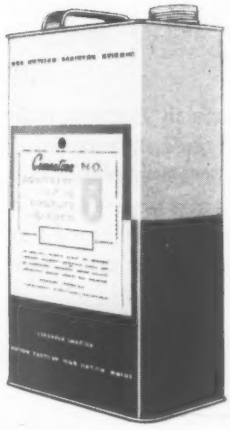

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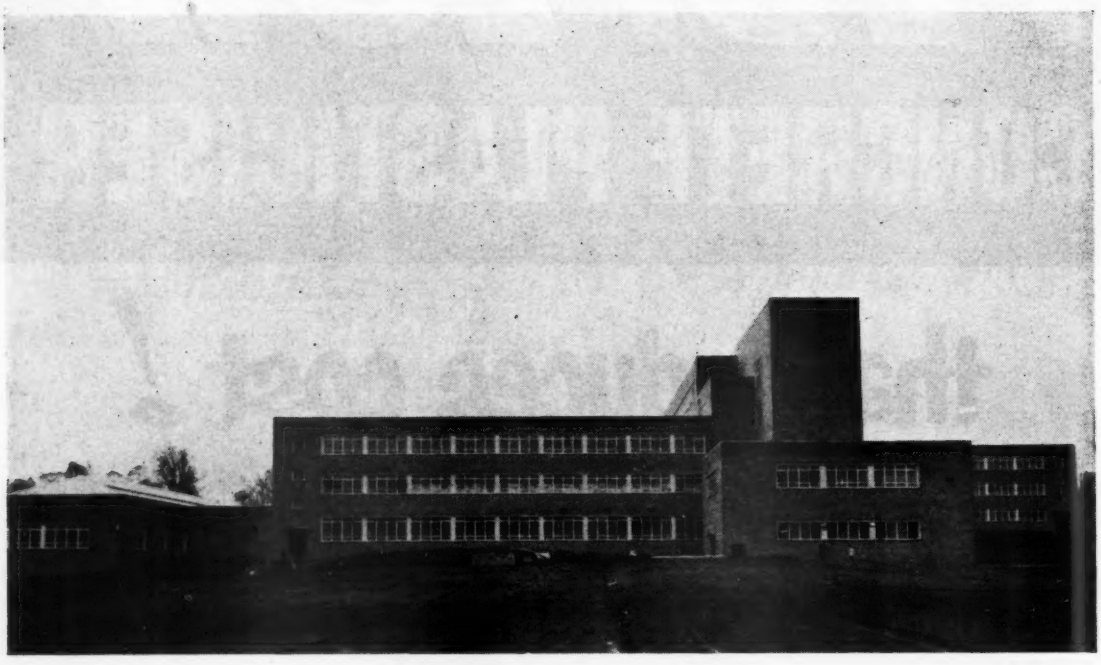

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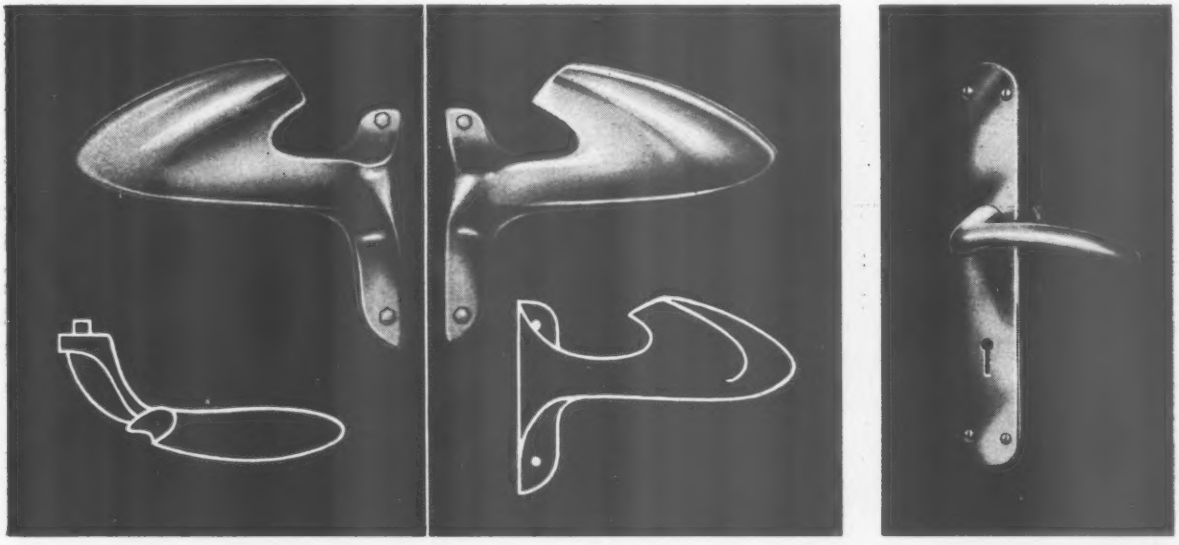

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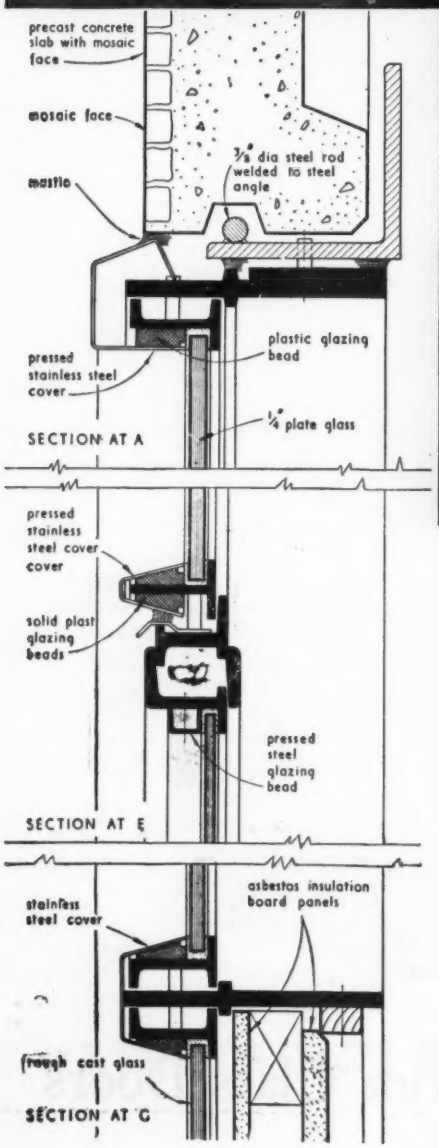

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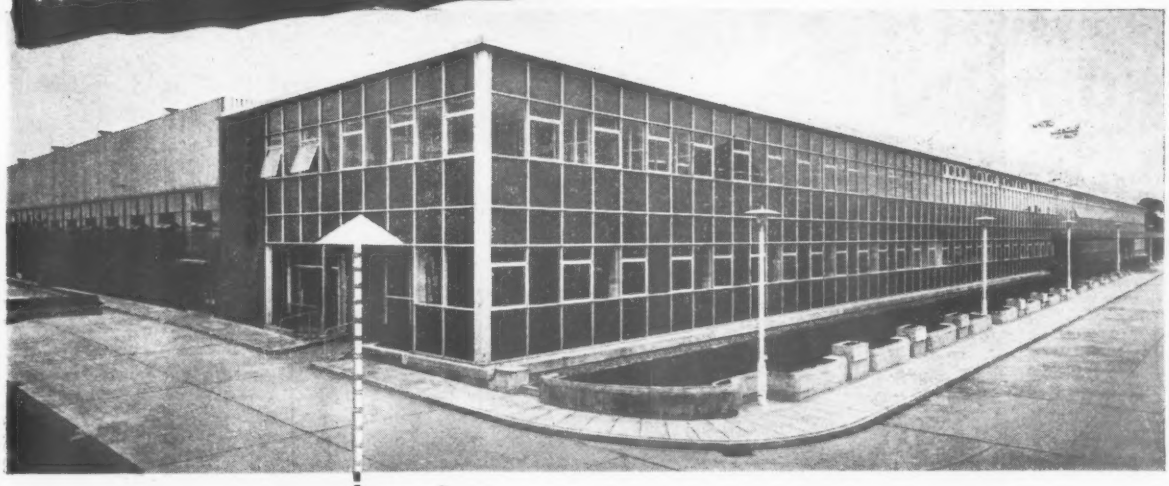

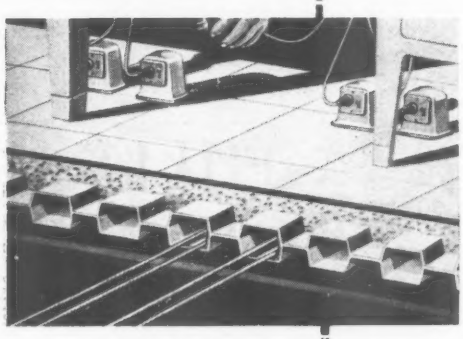

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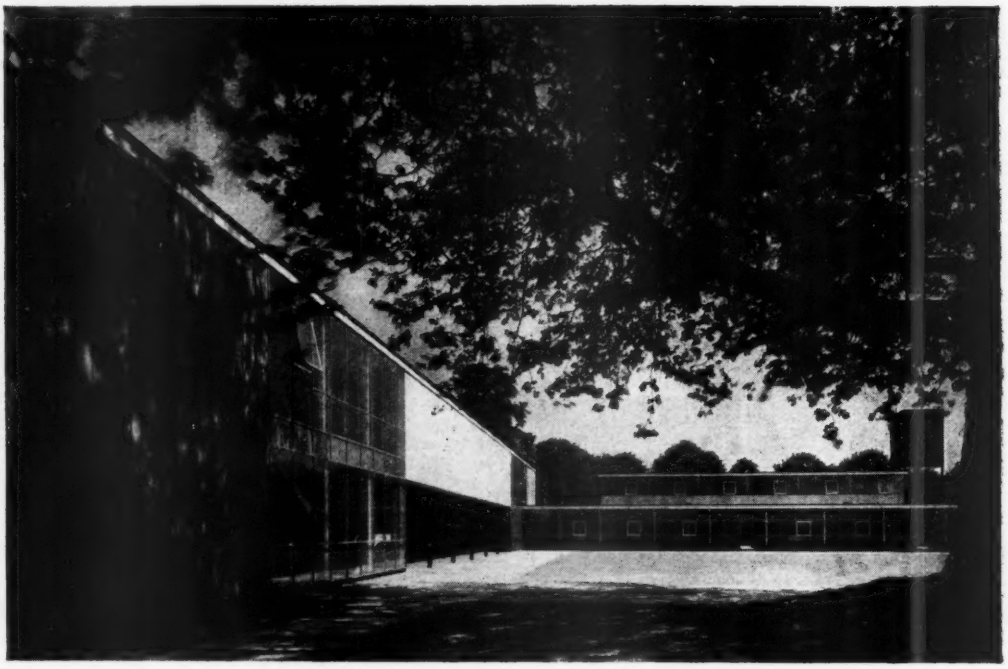
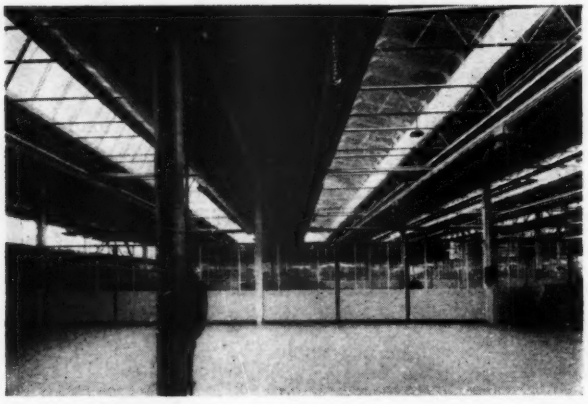
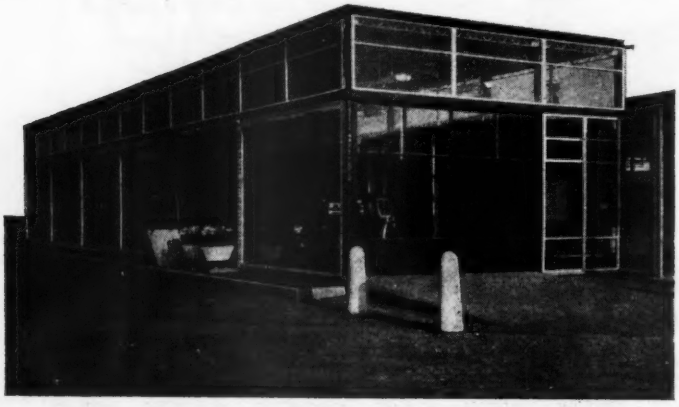


RIGHT: L.C.C. Spencer Park Secondary School.
Professor Sir Leslie Martin, former Architect to the London County Council.
Architect in Charge: J. M. Kidall, A.R.I.B.A.

BELOW: New Transistor Factory for Mullard Limited, Southampton.
Architects: Wallis Gilbert & Partners.



BELOW: Kennings Ltd. New Service Station Harlow
Architects: Maxwell Gregory, A.R.I.B.A., in association with Ramsey, Murray, White & Ward, F/F.R.I.B.A. Consulting Architect: D. A. Birchett, A.R.I.B.A.



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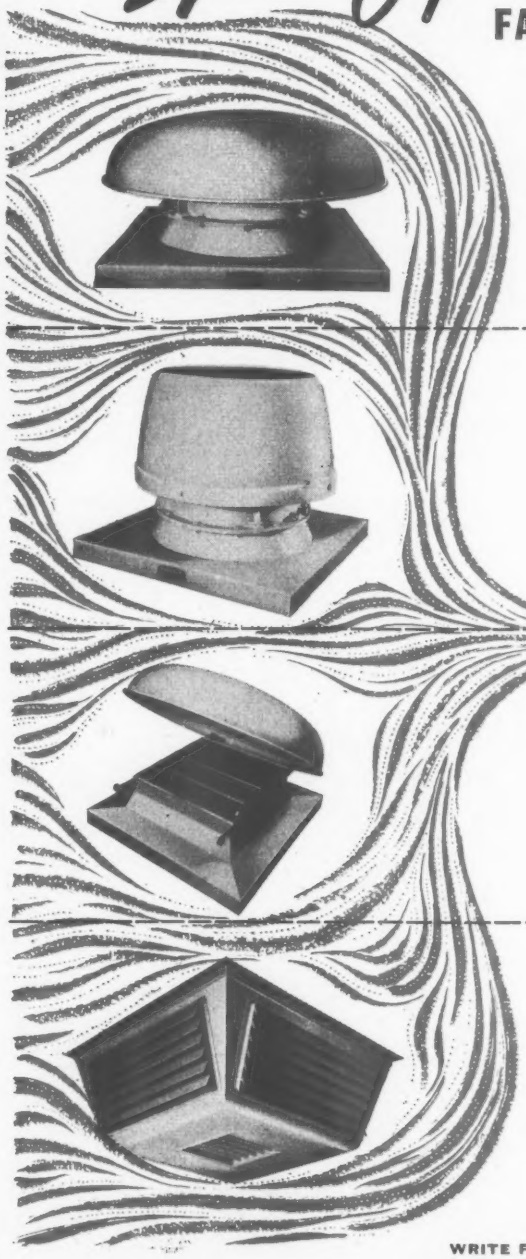

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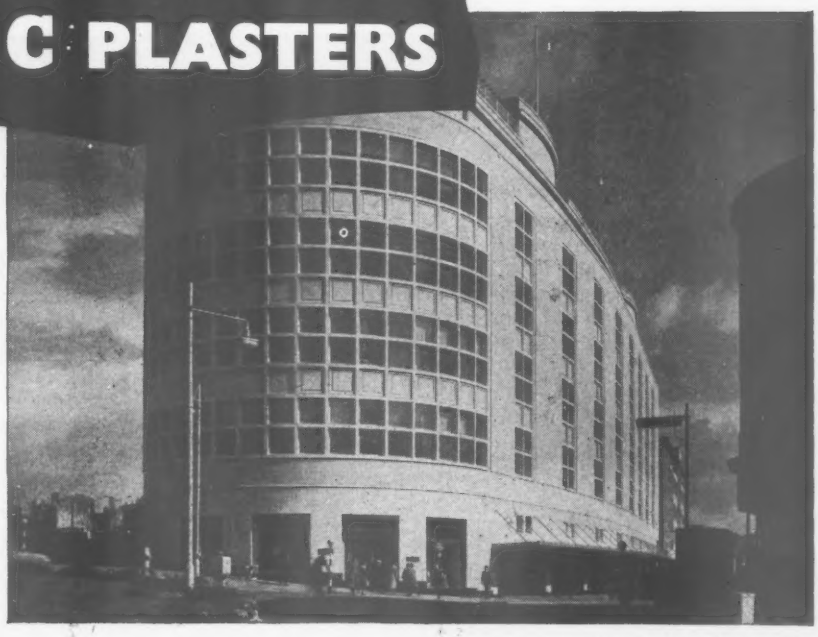

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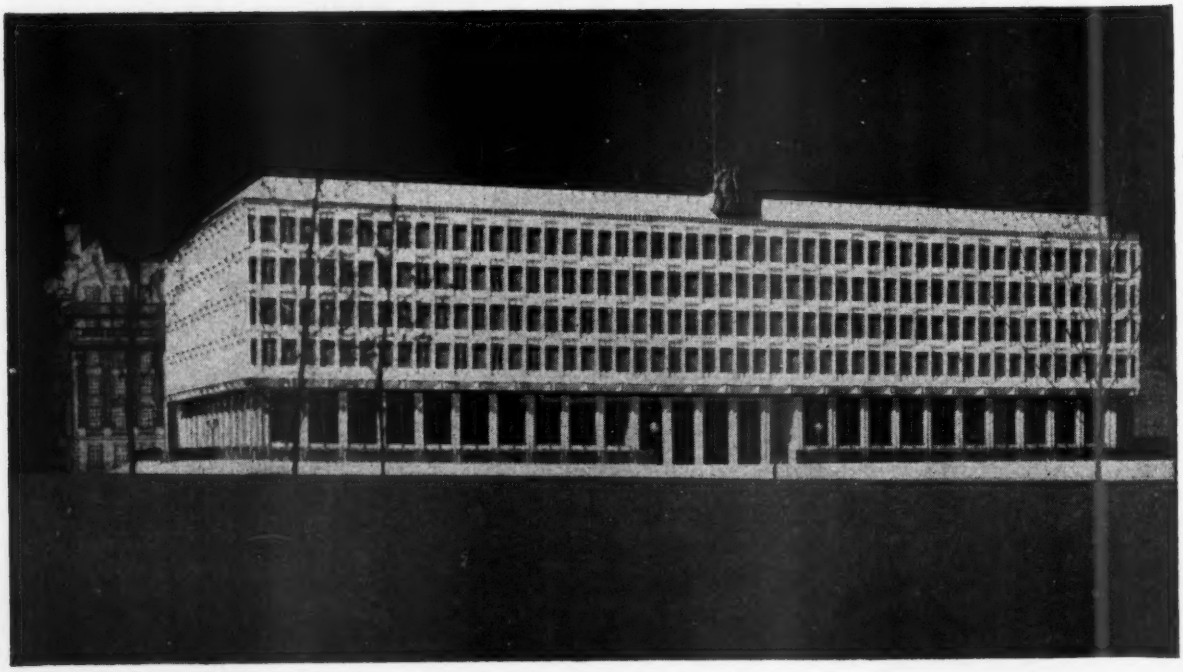

Architects: Messrs. Eero Saarinen and Associates, Michigan, U.S.A. in association with Messrs. Yorke, Rosenberg and Mardall, 2 Hyde Park Place, W.2.
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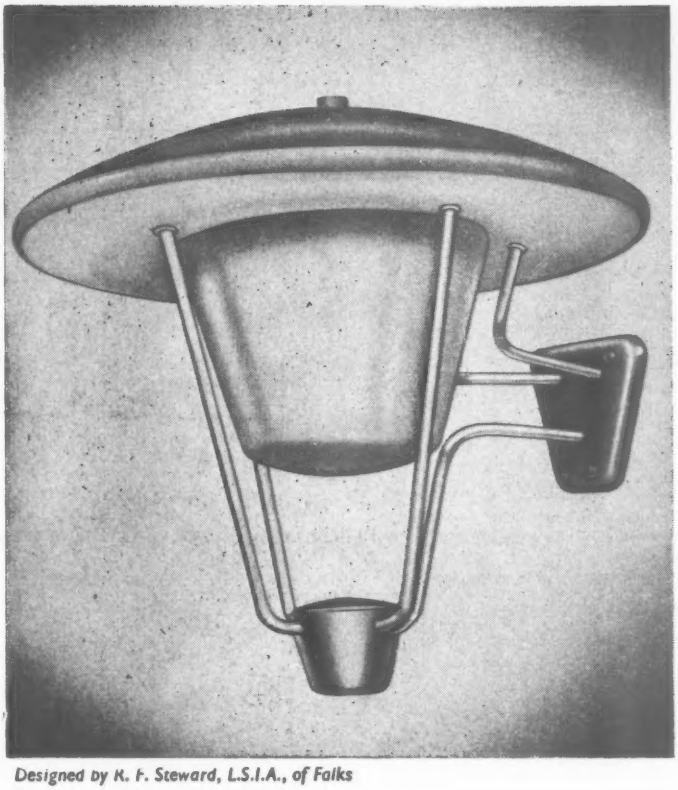

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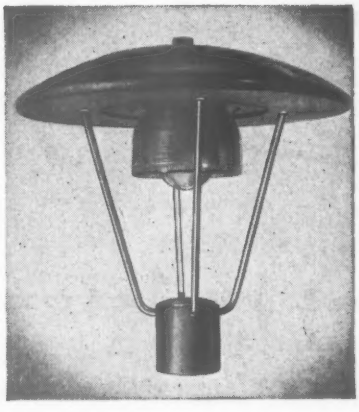

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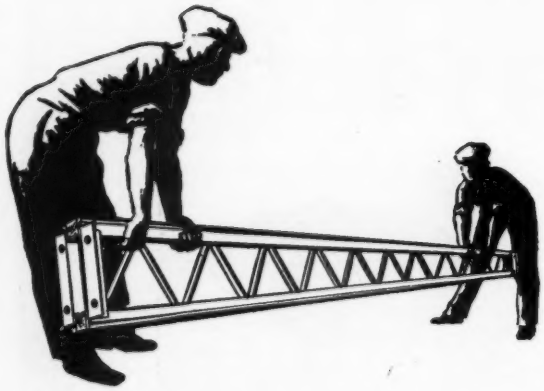

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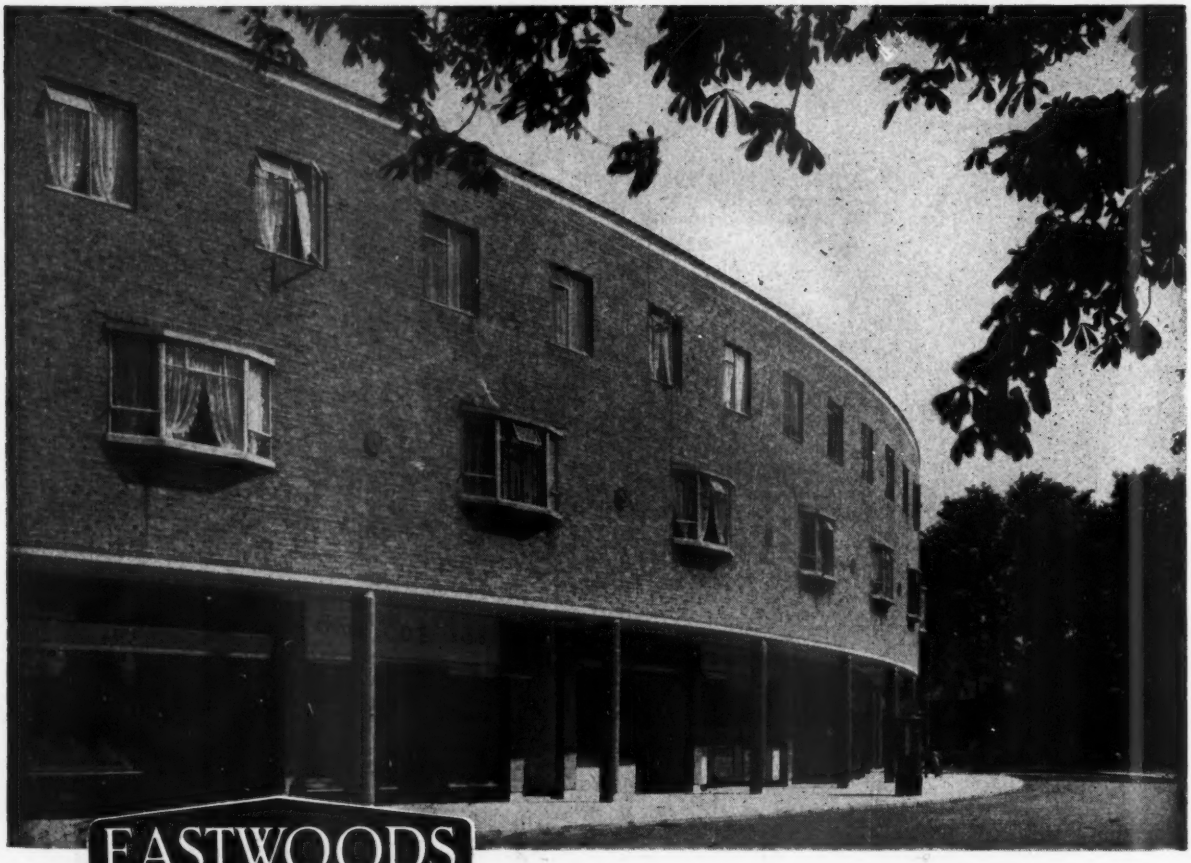

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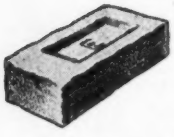

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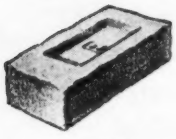

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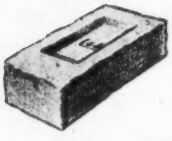

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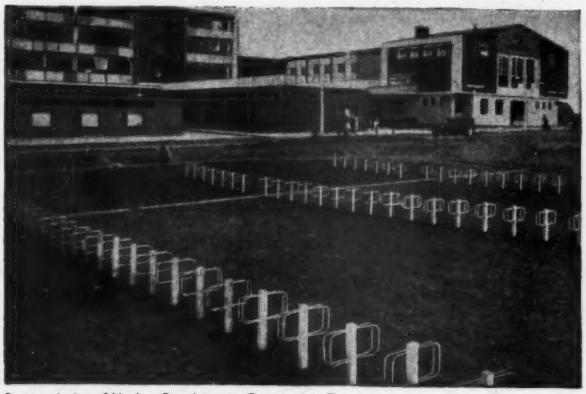

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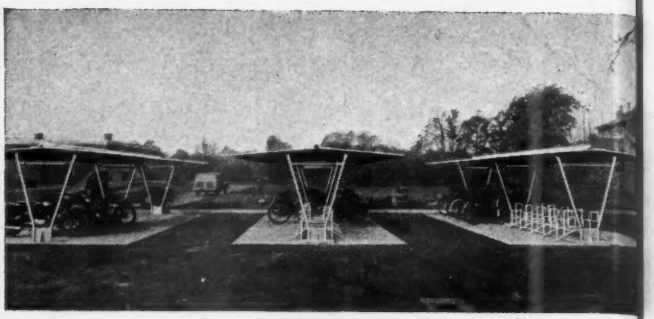

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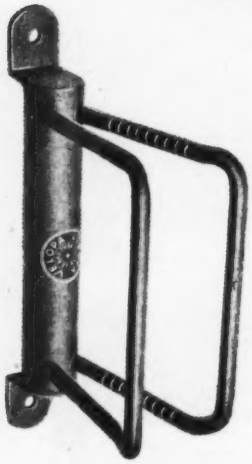

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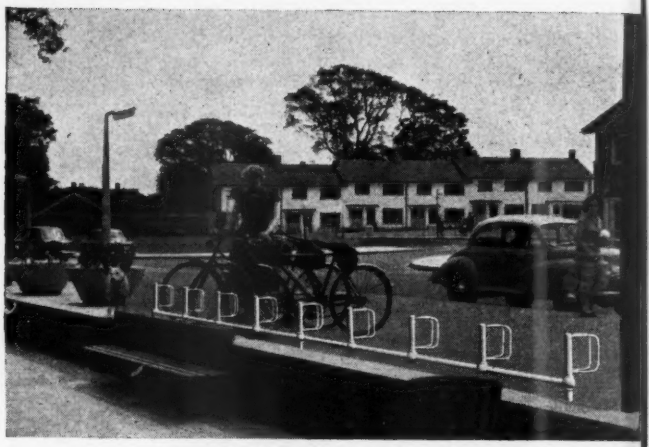

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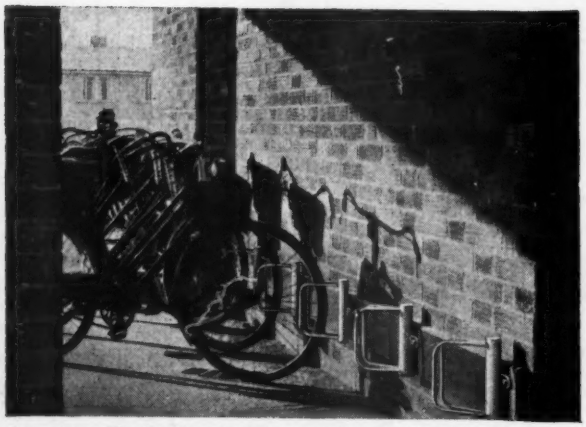

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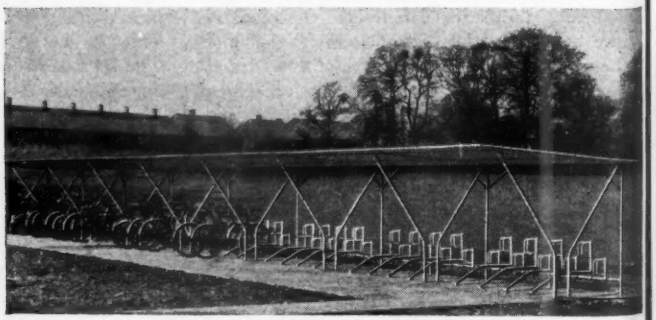

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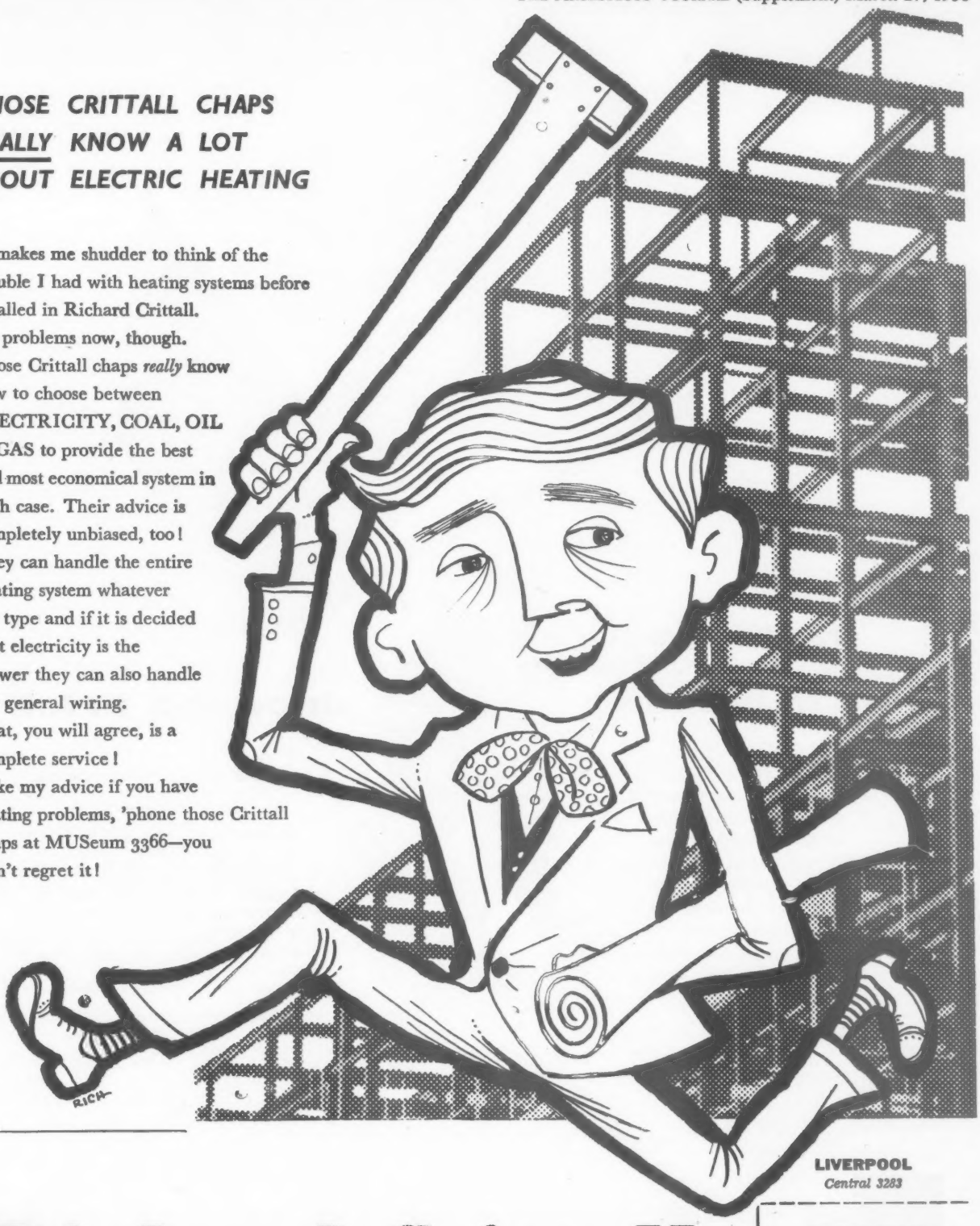

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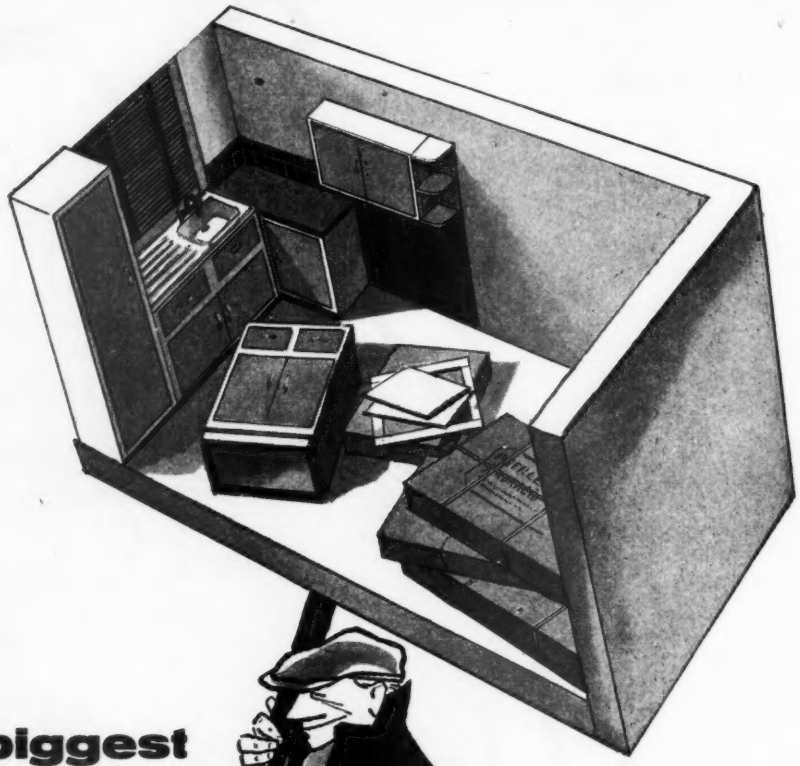

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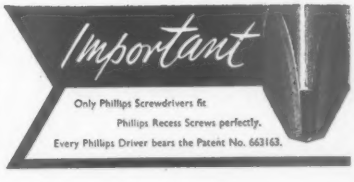

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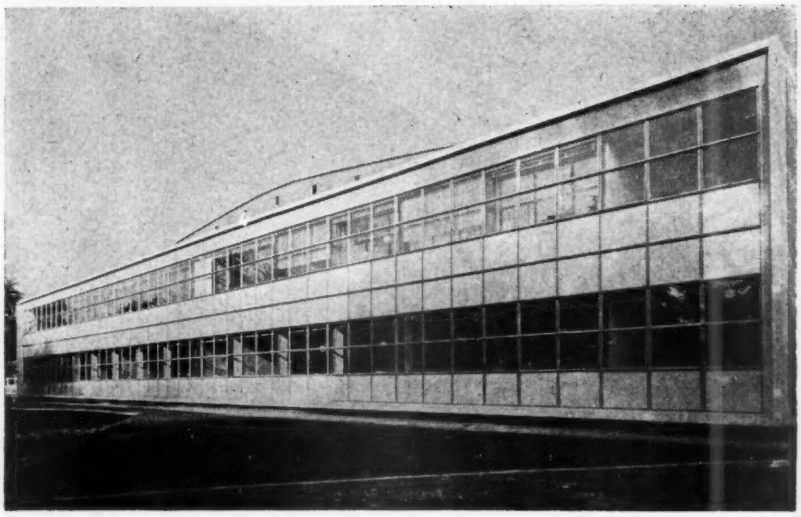

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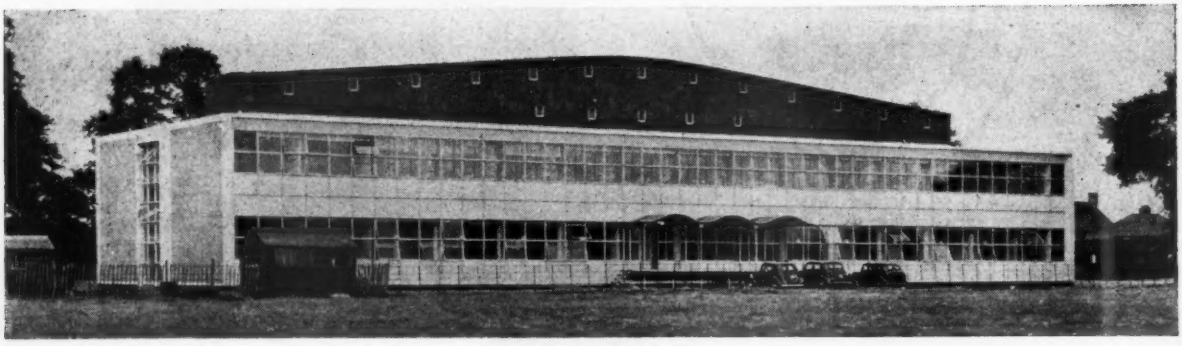

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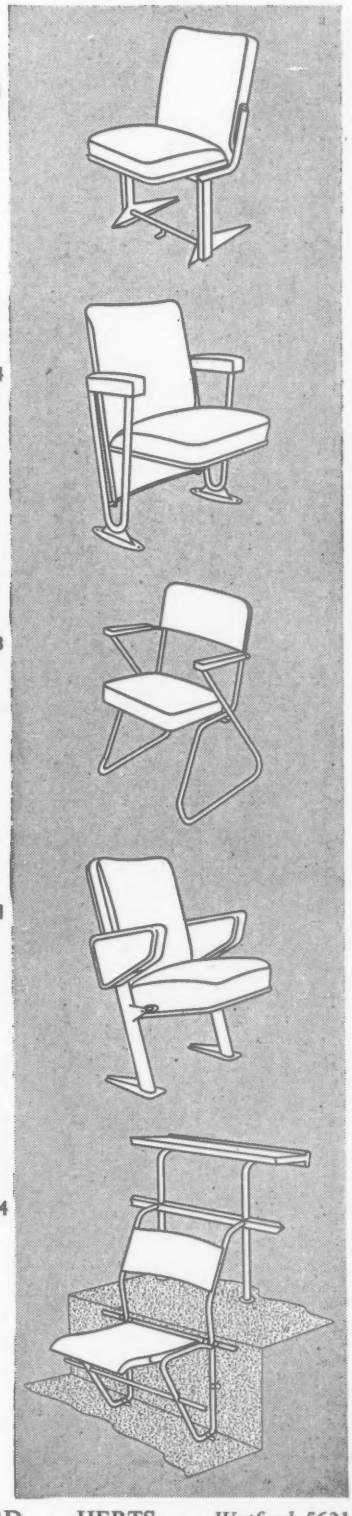

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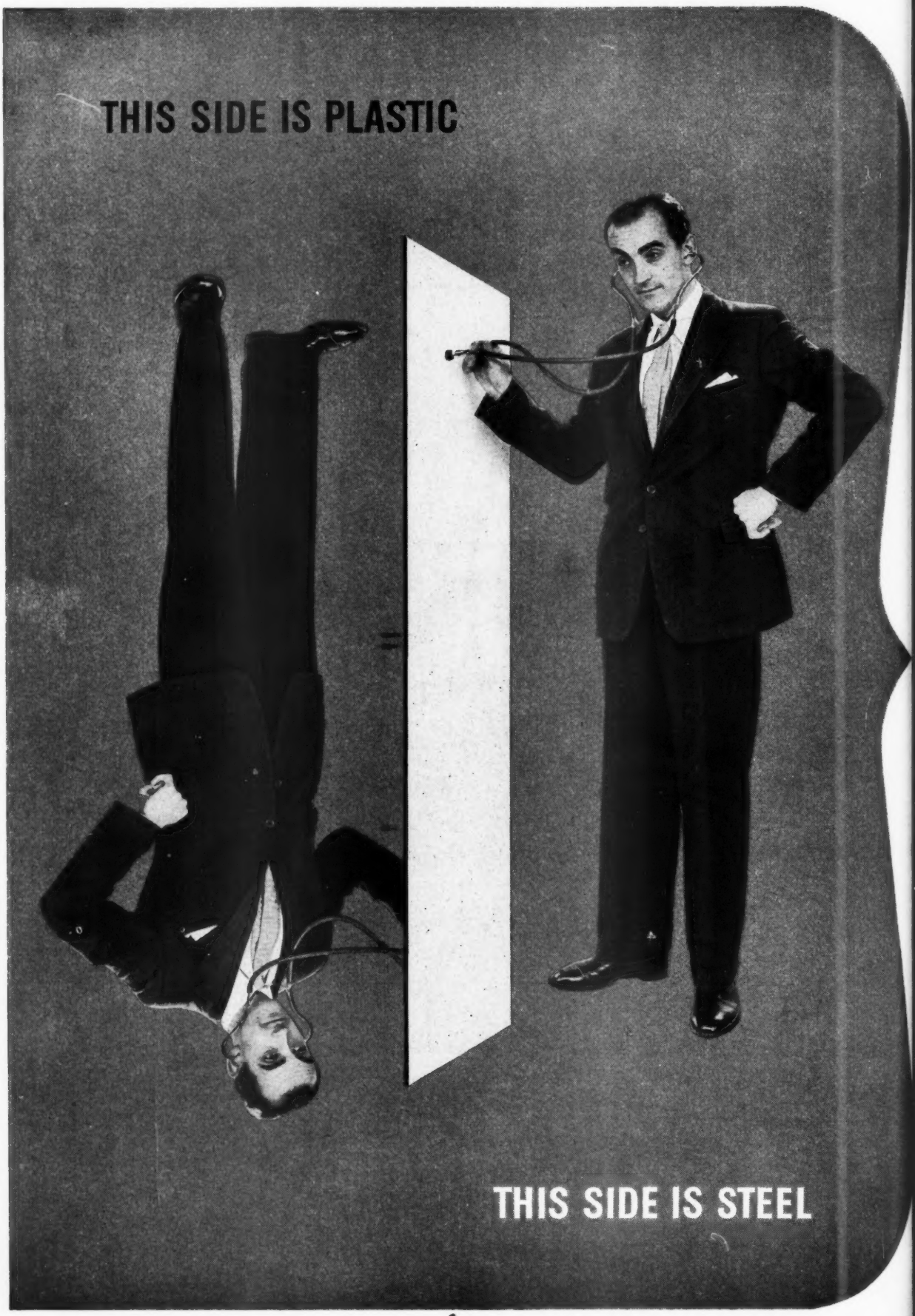
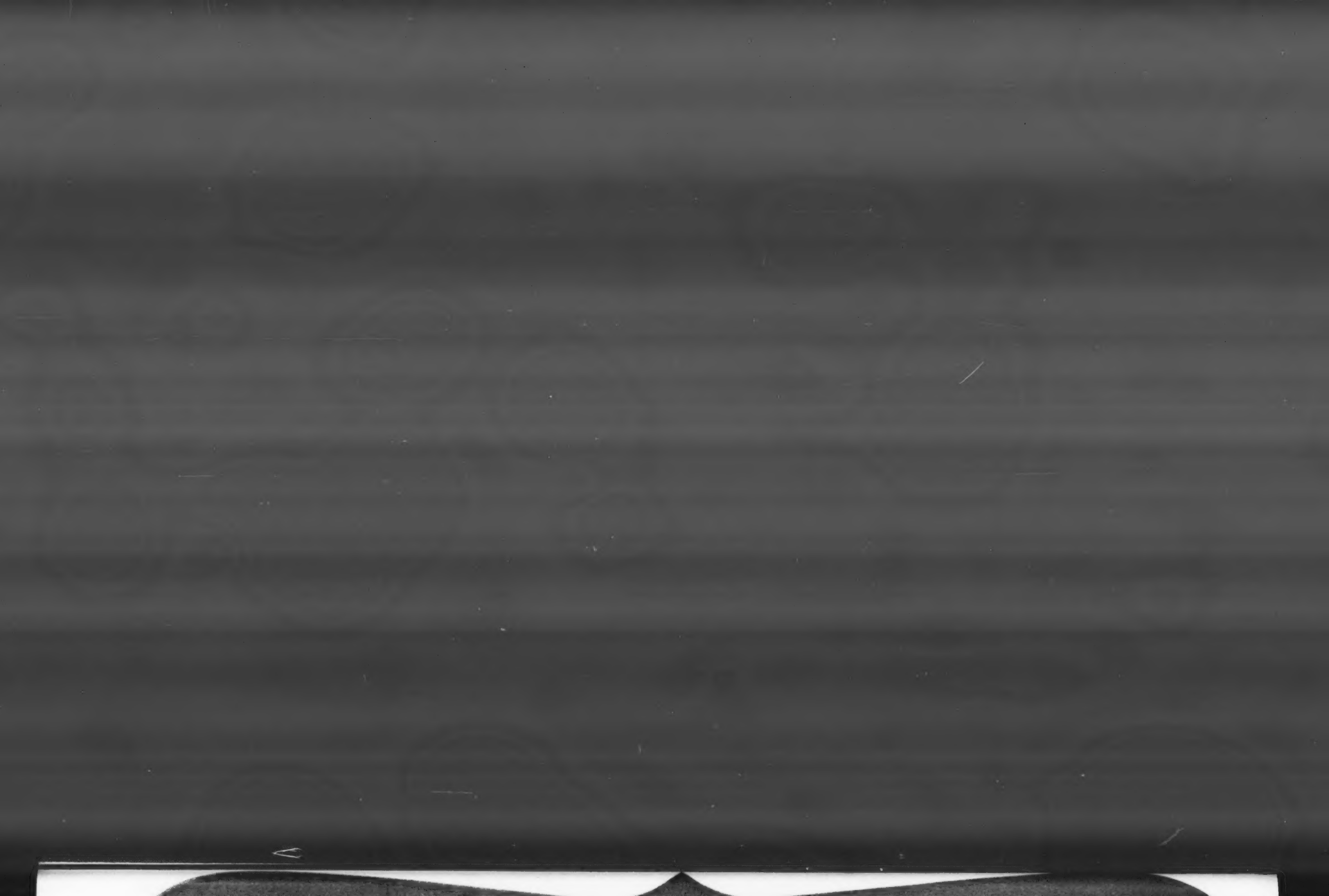

THIS SIDE IS PLASTIC
THIS SIDE IS STEEL



THE COMBINED RESULT IS

Stelvetite

PLASTIC BONDED TO STEEL

an exciting new material which will revolutionise 1,001 industries

John Summers & Sons Limited are now making what is undoubtedly one of the most remarkable materials ever produced by the steel industry—STELVETITE—a sheet of steel *permanently* covered on one side with a sheet of specially formulated Velbex P.V.C. made by BX Plastics Limited. The plastic is a thick coating, not a film, available in an enormous variety of finishes and colours, and its qualities include durability, resistance to acids, grease, water, hard wear, kicks, scuffs and chipping. *But this is only the beginning.*

Stelvetite can be bent and shaped! *Its bending qualities are remarkable—even through 180 degrees. Stelvetite can also be sheared, perforated and cut.*

Stelvetite can be deep drawn! *It is suitable for deep drawing and even extra deep drawing for special applications, with the plastic surface inside or out, and it may be seamed or crimped without disturbing the plastic surface.*

Stelvetite can be joined! *There are many ways of joining Stelvetite—even a special welding process which does not affect the plastic.*

As you will see, even from this, the industrial possibilities inherent in Stelvetite are enormous. In fact, wherever steel goes, there can go Stelvetite—the steel with the built-in finish.

John Summers & Sons Limited and their products are known the world over. Stelvetite will be no exception. It is a revolutionary material produced by a free enterprise company whose policy is one of continuous venture. Write to: John Summers & Sons Limited, Dept. MRD. 7, Shotton, Chester, for further details of Stelvetite.

MADE IN GREAT BRITAIN BY

John Summers & Sons Ltd

IN CO-OPERATION WITH BX PLASTICS LIMITED

BLUE HAWK PRODUCTS

This advertisement is produced to B.S. 1311, 1956, governing Trade and Technical publications

NATIONAL FUEL ECONOMY

thermal insulation is in the news!

It is an essential of modern construction but how to gain its advantages with minimum cost?
The answer to this problem is BRITISH PLASTERBOARD which gives you

Efficient thermal insulation plus
Fire resistance plus
Low cost–less than a1d. per sq.ft. extra–plus
***Dry* construction**

For a high degree of Thermal Insulation use

'Paramount'

INSULATING PLASTERBOARD

also available

Water resisting ***'Paramount'***

PLASTERBOARD

and the original

'Paramount'

PLASTERBOARD

Paramount Insulating Plasterboard in use for bedroom ceilings of low cost housing.

A Technical Representative will call by appointment
Particulars from

THERMAL INSULATION DIVISION
THE
BRITISH PLASTER BOARD
(Manufacturing) LTD

BATH HOUSE. 82 PICCADILLY. LONDON. W.1 TELEPHONE: GROSVENOR 8311.

APSI

The GREENWOOD-AIRVAC Skirting Duct System

accommodates Post Office and internal telephone cables, power and lighting wiring

- Supplied in 6 ft. lengths complete with requisite Tee-sections and 90° angle bends for inner or outer access
- *Can be cut on site. Extra self-tapping screws supplied for cover plate fixing*
- Electrical continuity throughout
- Other sizes made to order

Please write or phone for prices and further details and the descriptive leaflet on the Greenwood-Airvac Underfloor Conduit System

Visit Stand E 49, Factory Equipment Exhibition, Earls Court, April 14—19

Greenwood-Airvac *conduit systems*

REG. TRADE MARK

GREENWOOD'S AND AIRVAC VENTILATING COMPANY LTD
Patentees, Designers and Manufacturers of Ventilating Equipment and Electrical Conduit Systems
BEACON HOUSE, KINGSWAY, LONDON W.C.2. CHAncery 8135/6/7. 'Airvac', London

new!

101

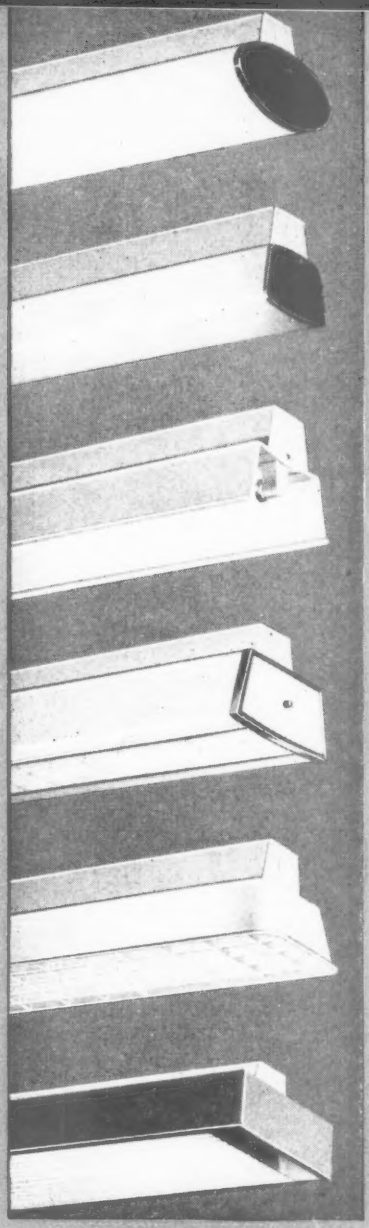
range

FLUORESCENT FITTINGS

by

G.E.C.

THE REALITY OF A COMPLETE LIGHTING SERVICE



The 101 Range is an entirely new range of contemporary styled industrial, commercial and decorative fluorescent fittings—the successful outcome of team work by G.E.C. fittings designers and illuminating engineers.

The 101 Range sets a new standard of adaptability. Using as a basis channels of common cross section, various single or twin light fittings from 1½ ft. to 8 ft. in length are built without a multitude of small parts.

The 101 Range offers the industrial user for the first time vitreous enamelled closed end trough reflectors made from a single pressing, jointless and with well-rounded corners. They are lighter, less susceptible to damage and easier to handle and clean.

The 101 Range uses in its 8 ft. fittings new Osram 125 w. tubes with recessed double contact caps. This new cap design protects tube ends and allows replacement by one person from one ladder position. Other advantages of the new caps are firm support and location of tube without contact pins or independent clips, and smaller "dead region" at tube ends with consequent shadow reduction. In the 5 ft. fittings, as well as the shorter units, bi-pin holders are standard. Osram guaranteed tubes are available in these lengths with bi-pin caps.

The 101 Range *of fluorescent fittings is fully described and illustrated in a lavish new catalogue—publication F4068—which will be sent to you on request.*

THE GENERAL ELECTRIC CO. LTD., MAGNET HOUSE, KINGSWAY, LONDON, W.C.2

Brush off the fear of FIRE!

With OXYLENE BORAM Fire Retardant Coating which raises inflammable surfaces to Class 1 "surface spread of flame" (B.S. 476-1953).

OXYLENE BORAM can be over-painted or applied to painted surfaces without loss of fire retarding qualities. It gives real fire protection and is approved by Local and Fire Authorities.

Free Technical Service.
Write for particulars.

OXYLENE BORAM

Use TRANSPARENT for Veneers and Fabric RINSE for Textiles

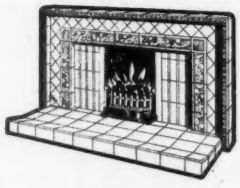
FIRE RETARDANT COATING

"Used in every Industry"

THE TIMBER FIREPROOFING CO. LTD.,
13a Old Burlington Street, LONDON, W.1.
Tels.: Regent 2489 (2 lines)
Works at:— Market Bosworth, Nuneaton
Queen Elizabeth Avenue, Hillington, Glasgow, S.W.2.

OHB/2376 A

Everybody admires a ROYAL VENTON fireplace



JOHN STEVENTON AND SONS LIMITED
BURSLEM STOKE-ON-TRENT STAFFS
Tel: Stoke 84261-2 · Grams: Steventon Burslem

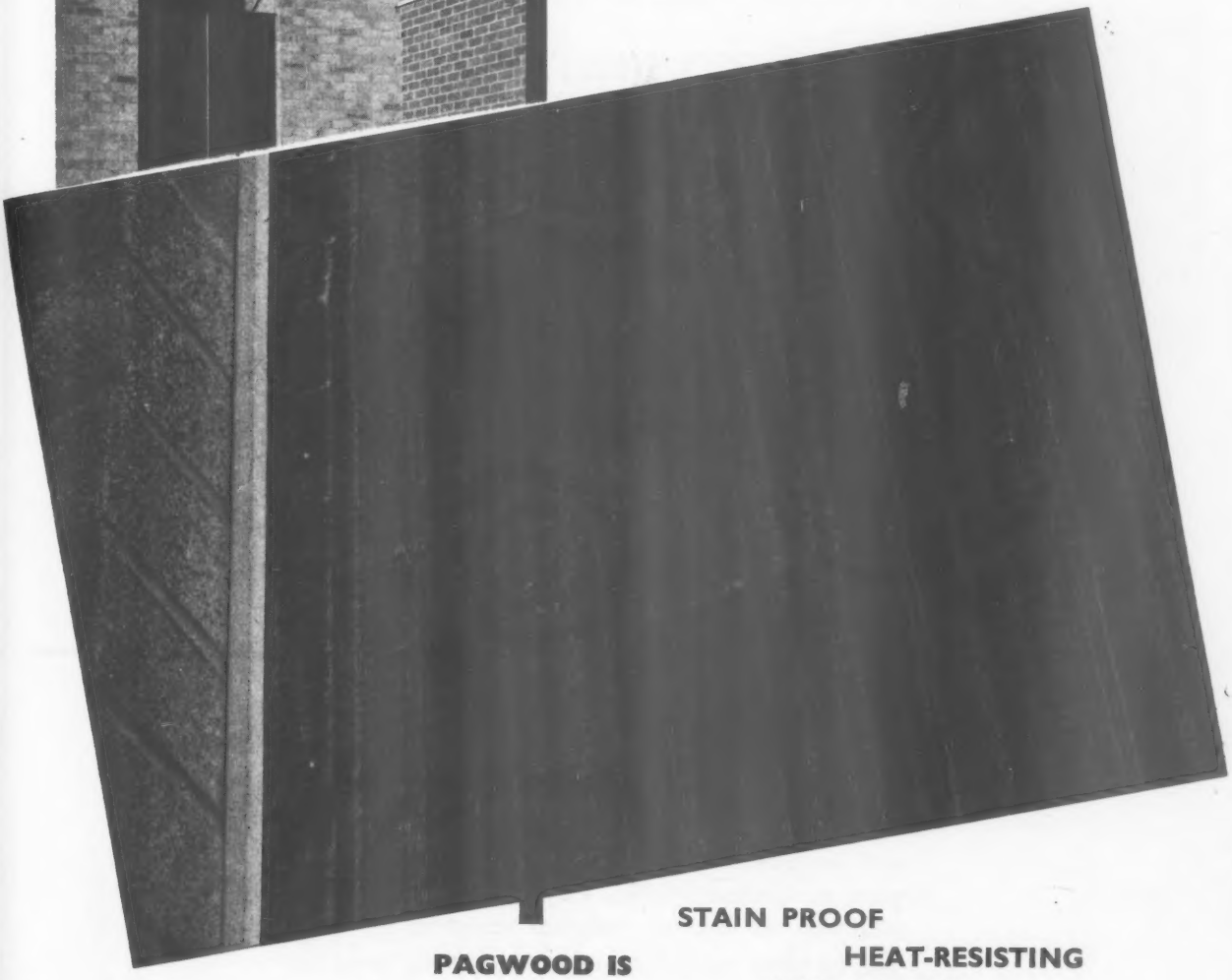
farmer

a place in the SUN for

PAGWOOD

—or in rain, snow or storm.

These panels, used on the Basingstoke Council Estate, have been in an exposed southern position for over fourteen months without any sign of weathering. The illustration below shows, in close-up, its unblemished surface today.



PAGWOOD IS

STAIN PROOF
HEAT-RESISTING
NON-POROUS
TERMITE PROOF
VIRTUALLY INDESTRUCTIBLE

The lustrous grained surface of PAGWOOD requires no maintenance—when dirty or dull a wipe with a damp cloth restores its polish.

C. M. SANDERSON (LONDON) LTD., 9 SOUTHAMPTON PLACE, LONDON, W.C.1. Telephone: CHAncery 2132

An announcement of particular importance to users of METAL WINDOWS

FROM APRIL 1st 1958

THE STANDARD METAL WINDOW CO.

OF STONEHOUSE WORKS, WEST BROMWICH

MACLEAN & CO. (METAL WINDOWS) LTD.

will merge their business interests and in future the two companies will be known as

STANDARD MACLEAN LTD.

WITH HEAD OFFICE AND WORKS AT

CADZOW WORKS, LOW WATERS ROAD,
HAMILTON, LANARKSHIRE.

Telephone: HAMILTON 1410/4 *Telegrams:* "PERAMIX" *Hamilton.*

and the reason why....

To take full advantage of the modern factory and equipment and the large electro-galvanising plant at Cadzow Works, Hamilton, to increase efficiency, to improve technical resources and to effect economies in manufacturing and overhead costs:- to increase Sales Organisation.

Photograph reproduced by courtesy of Allen & Hanburys Ltd. Photograph: Architectural Press Ltd.

EVERY BUILDING SHOULD BE AS SAFE AS THIS . . . . . .

Allen & Hanburys new Laboratories at Ware are really safe. They have the latest A.F.A. fire alarm system which, with its sensitive detectors in all parts of the building and the direct connection to the works fire station, will automatically call the brigade to the smallest outbreak within minutes.

The A.F.A. system, approved by Fire Officers and qualifying for valuable insurance rebates, is fully described in our book "If you had a fire tonight." Please send for your copy.

AFA

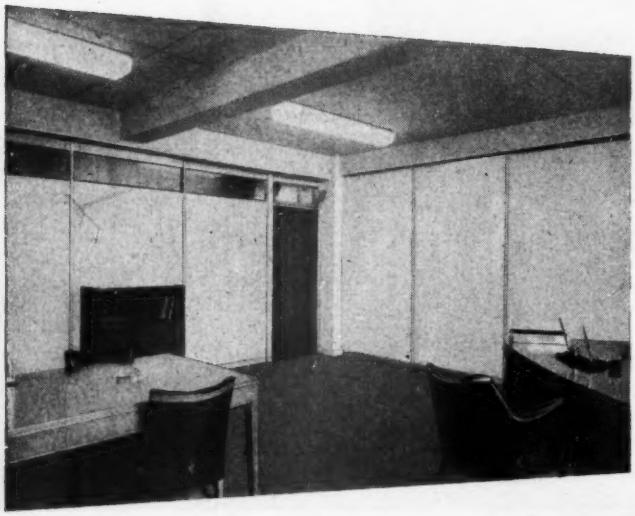
AUTOMATIC FIRE DETECTION

ASSOCIATED FIRE ALARMS LIMITED

Claremont Works, Claremont Road, London, E.17 **Telephone: Larkswood 8373**

Branches throughout Great Britain

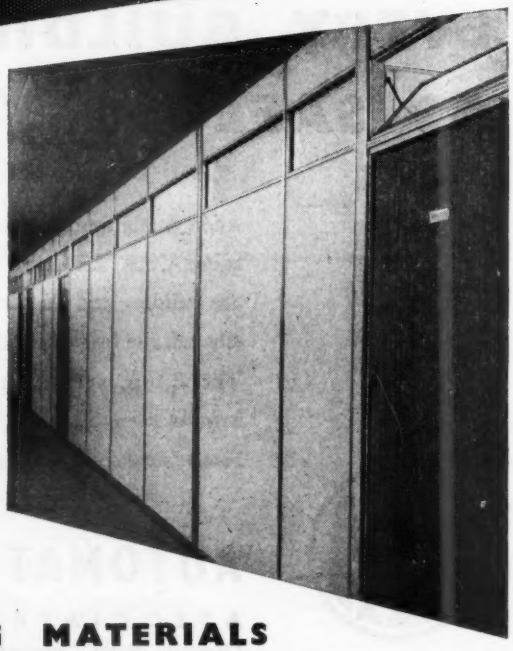
GLINEX IS THE MATERIAL FOR COMPACTITIONING*



Say Compactom Ltd.

Nowadays, more often than not, partitions are required to do a double job—of dividing a given area and, at the same time, providing the highest possible degree of thermal and acoustic insulation. In these cases Compactom Ltd., use a partition with a "Glinex" core (an inert material composed of flax shives amalgamated with synthetic resins) sandwiched between hardboard faces. The result is not only structurally sound and pleasing in appearance, but effects an improvement in working conditions all year round.

Most "Glinex" panels in their natural state can be supplied in 5 standard sizes, 10 thicknesses and 5 densities. In addition, panels of standard thicknesses and varying densities can be bonded together to meet specific requirements, thus offering a wide range of applications. They can be faced with wood veneers, asbestos-cement, hardboard, aluminium, plastic and other materials. The higher densities can be left in their natural state.



Partitioning by Compactom Ltd.
A 2¼" 'Glinex' core with hardboard facings. *

May we send you further details of this useful material which is rapidly establishing itself in the building and other trades? No obligation, of course. Write or 'phone

GLIKSTEN BUILDING MATERIALS

Carpenters Road, Stratford, London, E.15. Phone: AMHerst 3300. Liverpool Office: 87 Lord Street, Liverpool, 2. Phone: Central 3441

For greater kitchen-appeal

SPECIFY FRIGIDAIRE BUILT-IN REFRIGERATORS

Pictured here is the Frigidaire MY-32A: compactly-built, it shows the convenience of the left-hand door.

Frigidaire's most popular model, the MY-32A (gross capacity 3.2 cu. ft.), is ideal for building-in at floor or waist level. The door of this luxury Frigidaire opens within its own width and can be hung on either the left or the right-hand side of the cabinet. The MY-32A is available in the full range of Frigidaire colours. The larger Frigidaire models, the MY-45A and the DY-45A (both with a gross capacity of 4.5 cu. ft.) can also be built-in at floor or waist level. Like all Frigidaires they are quality-built; they give the largest possible storage capacity in the minimum of room; they are powered by the 5-year warranted, cost-cutting "Meter-Miser".

Let Frigidaire's complete range — from 3.2 to 11.1 cu. ft. in gross capacity — add to the kitchen-appeal of the houses *you* design!

Frigidaire also has the best equipment for commercial refrigeration

Frigidaire's complete commercial range includes: display cases and service cabinets for shops and supermarkets; cold rooms for the conservation of food; ice-cube makers, beverage and water coolers for hotels and public houses; low temperature cabinets and mortuary chambers for hospitals. Frigidaire equipment gives perfect service in all fields of industry and commerce.

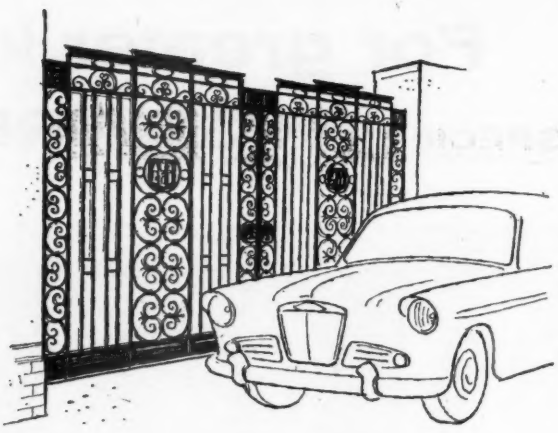
Now all Frigidaire compressors carry a Five Year Warranty — one of the benefits of Frigidaire's Five Point Programme for commercial refrigeration. Specification sheets on building-in, literature and further details of commercial refrigeration equipment available on request. Write (address below), or see your nearest Frigidaire Distributor, *today*.

FRIGIDAIRE

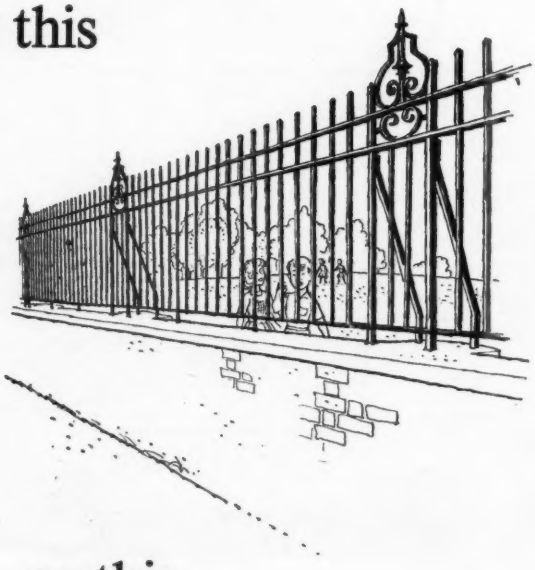
REGD. TRADEMARK

FRIGIDAIRE DIVISION OF GENERAL MOTORS LIMITED, STAG LANE, KINGSBURY, LONDON, N.W.9.

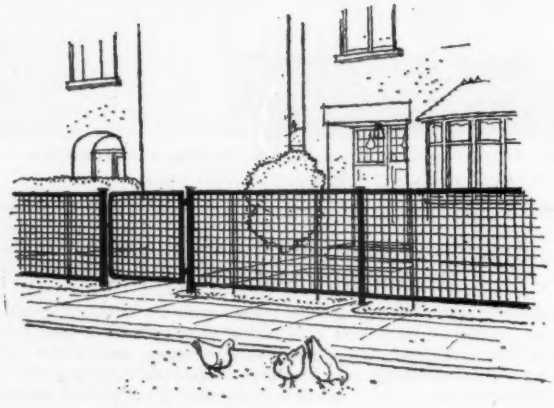
If you're asked for gates like this



or this



fencing like this



or this

. . . . . or any other sort of railing for balustrades, bridges or balconies, either to standard designs or to suit special requirements, the job will be done to perfection by the craftsmen of

BAYLISS, JONES & BAYLISS LIMITED

Makers of fencing and gates for over a century

BJB

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LONDON OFFICE: 139 CANNON STREET · LONDON · E.C.4 · TELEPHONE: MANSION HOUSE 8524

See us at the
Electrical Engineers
(A.S.E.E.) Exhibition, Earls Court
March 25th to 29th
Stand No. H. 11

BY APPOINTMENT TO HER MAJESTY THE QUEEN MANUFACTURERS OF ELECTRIC LAMPS

BOARDROOM?

DRAWING OFFICE?

THE ANSWER IN ONE—

'NEW-RANGE'

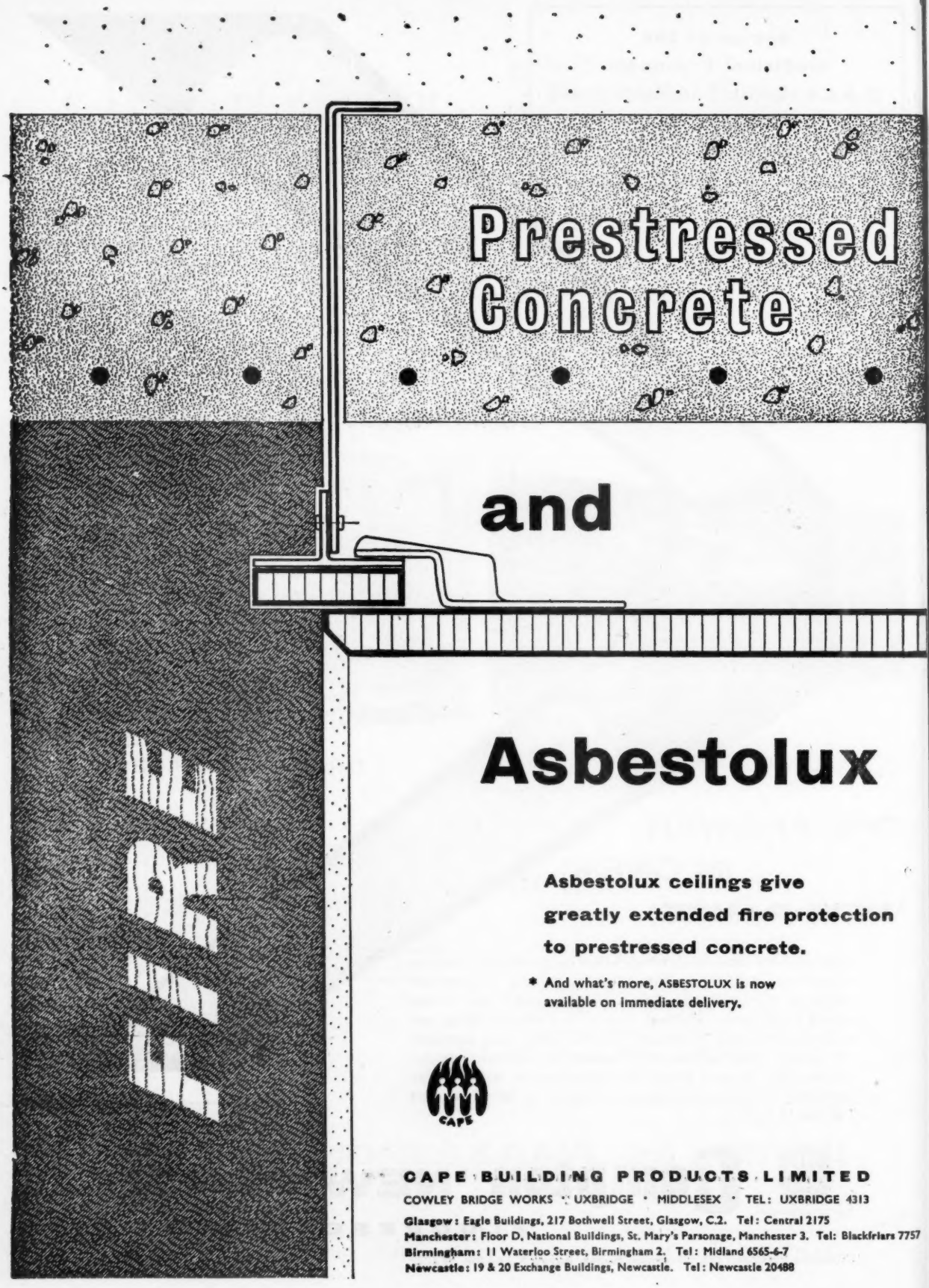
Decisions are often taken which affect the position or function of fluorescent fittings. With 'New-Range' this presents no problems. Standard 'New-Range' chassis accept such a wide variety of diffusers, reflectors, louvres and recess fittings that most general needs are immediately met. Finishes of outstanding quality—'Permawhite' with 'Perspex' or Vitreous Enamel—are available. Several prices have recently been reduced—an indication of the ever-increasing acceptance of 'New-Range' as the best in lighting.

ELECTRICAL EQUIPMENT

Crompton 'NEW-RANGE'

FLUORESCENT FITTINGS

Crompton Parkinson Ltd., Crompton House, Aldwych, London, W.C.2.


Prestressed
Concrete
and
Asbestolux
Asbestolux ceilings give
greatly extended fire protection
to prestressed concrete.
* And what's more, ASBESTOLUX is now
available on immediate delivery.
CAPE
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NEW BROCHURE ADDS THERMOSTAT PROFIT TO HEATING SALES

CHOOSE your room temperature . . . Honeywell's latest brochure addresses an irresistible appeal to the owners of all types of electrically operated heating equipment . . . to the heating industry's vast and profitable room thermostat market.

Four colourful pages illustrate the beautiful finish and graceful design of Honeywell Room Thermostats . . . show how they blend with any decor . . . tell how easily they can be installed, how trouble-free their operation.

Automatic profits . . . the new brochure stresses the convenience of automatic heating, the luxury of a constant, personally chosen room temperature. Readers are urged to buy a thermostat for existing equipment . . . to include one in orders for new equipment.

Write or send coupon now for a copy of the brochure to Honeywell-Brown Ltd., 1 Wadsworth Road, Perivale, Greenford, Middlesex.

Free!

Please send me a copy of the free brochure 'Choose your room temperature.'

Name .....

Address .....

.....

Business .....

A.J.

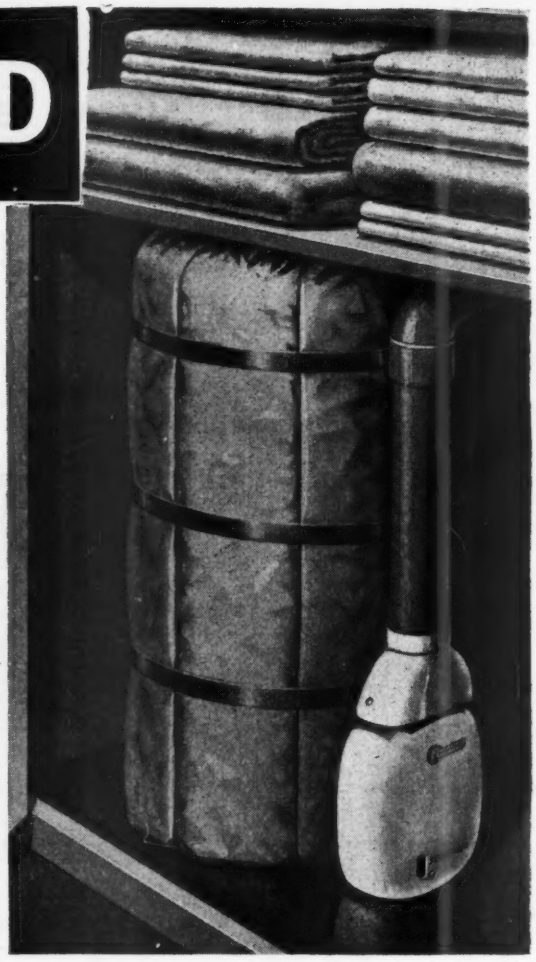
Honeywell

First in Controls

A.J.

FOR NEW BUILDINGS, CONVERSIONS & IMPROVEMENTS

NEW WORLD



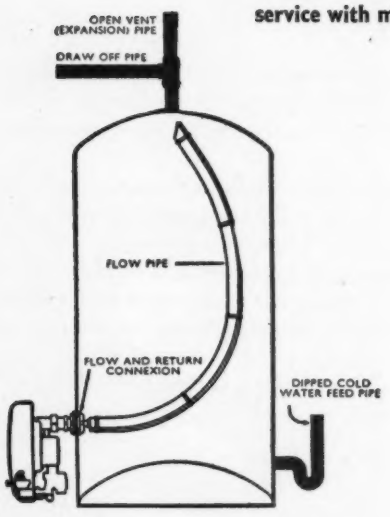
leads the way

with the *STRATALYN*

INJECTOR

GAS WATER HEATER

The NEW WORLD Stratalyn Injector Heater is inexpensive to buy, economical to run, cheap to fit, and will give maximum service with minimum maintenance



* *Gas Rating*—6,000 B.Th.U./hr.
Output—5¼ gallons raised 80°F.
Complete with governor and T.C.O.
Available with flue cap or draught diverter. Finished in white vitreous enamel.

The **NEW WORLD Stratalyn** is a Regulo-controlled gas water heater for attachment to a storage cylinder or tank by means of a single connexion. It is the GAS application of the IMMERSION HEATER.

The flow pipe terminates close to the top of the storage vessel and hot water is injected into the top ready to be drawn off. Mixing is avoided and the highest degree of stratification is attained.

Fit and Forget

NEW WORLD
PRODUCT OF Radiation Ltd.

Water Heaters

Write for a free copy of the ARCHITECTS' BROCHURE ON NEW WORLD WATER HEATERS *to:*
RADIATION GROUP SALES LTD., 7 STRATFORD PLACE, LONDON, W.1

CIL

Complete Shopfitting Service

Staircase situated at
'THE SCOTCH HOUSE'
Knightsbridge, S.W.1

Illustrations show two designs in contrasting styles recently completed by C.I.L.

'BLACON HOUSE'
Original design by:
Carl Fisher,
Dip. Arch., F.R.I.B.A.

- SUPERB CRAFTSMANSHIP
- APPLIED DESIGN
- FULL CONSULTATIVE CO-OPERATION

CITY INDUSTRIAL LTD.

FARRINGDON STATION CHAMBERS, LONDON, E.C.1 Telephone: CLE 0222

Trusconversations 2

SCENE: An architect's office.
TIME: The present.

"Truscon? Oh yes — Plate System."

"You must have been reading our advertising!
But, of course, we do more than—"

*"Yes, I know: schools, offices, flats.
This thing I've got here is heavy industrial
work, with complex load-carrying problems. . . ."*

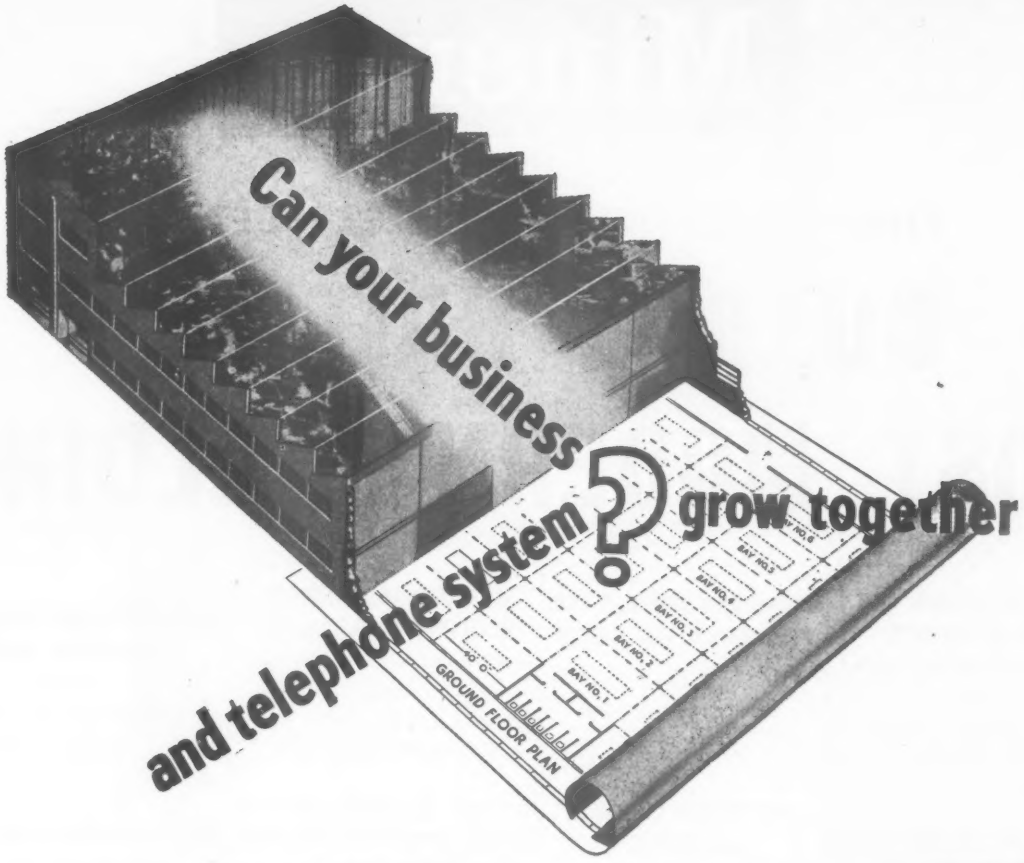
"We've been doing jobs like that for fifty
years. In fact—"

*"But look at this: storage bunkers,
tanks, heavy foundations. I must
give it to someone with experience
of this sort of big job."*

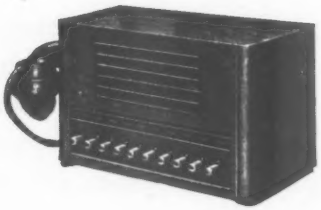
"What about Ansell's Brewery and Pilkington's
Glass Works? We've finished big extensions
for both within the last year."

*" Look, I must rush! I'll send
you the drawings on Tuesday."*

The Trussed Concrete Steel Company Limited, Truscon House, Lower Marsh, London SE.1 Telephone: WATerloo 6922



Speed in inter-departmental communication is the keynote of efficiency. The installation of a Reliance Private Automatic Telephone System soon establishes that atmosphere of orderly activity so essential to smooth business organization. The more your business grows the more telephones you will need. So make sure your telephone system is flexible. For preference select the Reliance PX.5100 P.A.X. It can be equipped initially for a few extensions and can be extended quickly —easily—when and where required. Complete installations supplied on rental with efficient maintenance service, saving capital outlay.



We shall be pleased to send you full details.

THE RELIANCE TELEPHONE COMPANY LIMITED

(A Subsidiary of the General Electric Company Limited)

43-47 PARKER STREET, KINGSWAY, LONDON, W.C.2

Telephone: CHAncery 5341 (P.B.X.) Branches throughout the United Kingdom.

INTERNAL TELEPHONES · STAFF LOCATION · MUSIC FOR INDUSTRY

L10079

Minerva

FIRE PREVENTION BY NUCLEAR DETECTION

GUARDS BRITAIN'S MOST MODERN BUILDINGS

BANK OF LONDON AND SOUTH AMERICA VICTOR HEAL & SMITH, F/F.R.I.B.A., and JOHN WRIGHT, F.R.I.B.A., *were the Associated Architects*	**MARKS AND SPENCER LTD. PRINCES ST., EDINBURGH** *Architects :* MUNRO AND PARTNERS Glasgow	**METROPOLITAN-VICKERS ELECTRICAL CO. LIMITED** *New Research Laboratory at Wythenshawe* *Architects :* HARRY S. FAIRHURST & SON, Chancery Chambers, Manchester	**ELECTRONIC INSTRUMENTS LTD. RICHMOND, SURREY** *Architects :* KENNETH ANNS, F.R.I.B.A., 1 Lincoln's Inn Fields, W.C.2
THE EXCHANGE TELEGRAPH COMPANY LIMITED *Architects :* TRIPE AND WAKEHAM, F/A.R.I.B.A., 16 Fitzhardinge Street, W.1	**UNIVERSITY LIBRARY, CAMBRIDGE** *Architects :* SIR GILES SCOTT, SON AND PARTNERS, 9 Gray's Inn Square, W.C.1	**BRITISH EUROPEAN AIRWAYS FLIGHT SIMULATOR BUILDING** *Consulting Engineer :* SCOTT & WILSON, KIRKPATRICK AND PARTNERS, 47 Victoria Street, W.1 *Architects :* RAMSEY MURRAY, WHITE & WARD, 32 Wigmore Street, W.1	**COMMUNICATION SYSTEMS LTD. MARSHALSEA RD., S.E.1** *Architects :* A. FRANCIS BENNET, M.A., A.R.I.B.A., 35 Queens Gate Mews, S.W.7

THE scientific application of nuclear physics to the problem of fire prevention has cut dramatically the time necessary for calling into action fire-fighting services and equipment. The first trace of combustion (before any flame or appreciable heat is generated) is sensed by the Minerva Nuclear Detector which immediately operates an alarm or brings automatic fire-fighting equipment into action. Exhaustive tests by independent public bodies have proved that in buildings, stores and factories protected by Minerva fire is given no chance to establish a hold before the alarm is raised.

HOW MINERVA IS INSTALLED

One Minerva Detector guards up to 1,000 sq. ft. of floor space. Groups of Detectors, wired in a 2-wire system following normal electrical installation practice, are connected to a combined control unit and signal panel which indicates the area in which the alarm originates. From the signal panel, the alarm can be automatically transmitted to the Fire Station or watch office, or it can be arranged to activate fire-fighting equipment on the spot.

OTHER USERS OF MINERVA

include the Admiralty, Air Ministry, Ministry of Supply, G.P.O., British Electricity Authority, London Transport Executive, U.K. Atomic Energy Authority and British Railways. In factories, department stores, warehouses, museums and offices, Minerva is continually on watch, consuming no power whilst on guard but springing instantly to life and summoning aid the moment combustion products approach any of its radioactive Detector heads.

TE CUSTOS URBIS
MINERVA

No building protected by Minerva has ever been destroyed by fire.

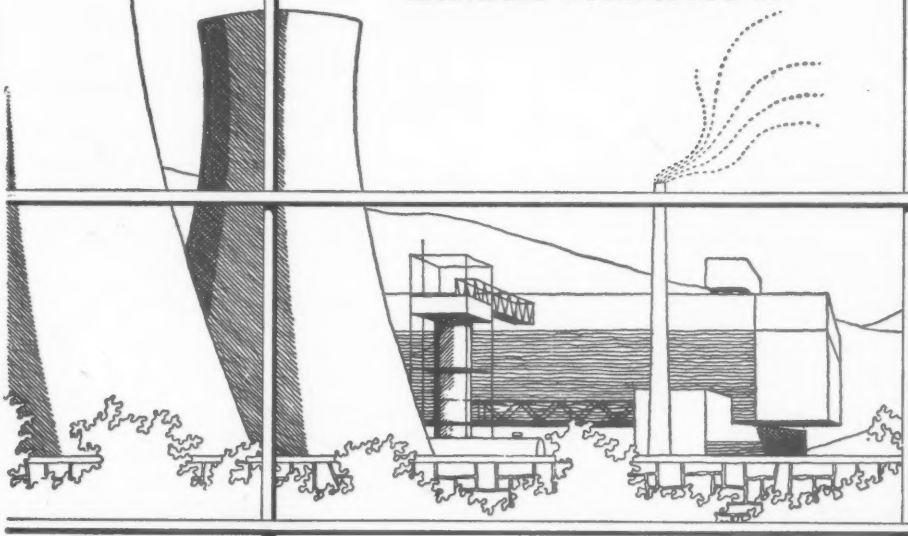
Write for full details of the Minerva System of Fire Prevention by Nuclear Detection to :

THE MINERVA DETECTOR CO. LTD., RICHMOND, SURREY · TELEPHONE: RICHMOND 6431

Architects:
S. N. Cooke & Partners F./F.R.I.B.A.

Main Contractors:
William Towson & Sons Ltd., Bolton.

Maxweld reinforces it



The reinforcement fabric used in the Metal Box Company factory at Bolton was supplied by Richard Hill. Do you need reinforcements? Then call up the Maxweld man! He can give you all the facts on the type and quantity of fabric you'll need plus a rough idea of the cost. And he's backed by the

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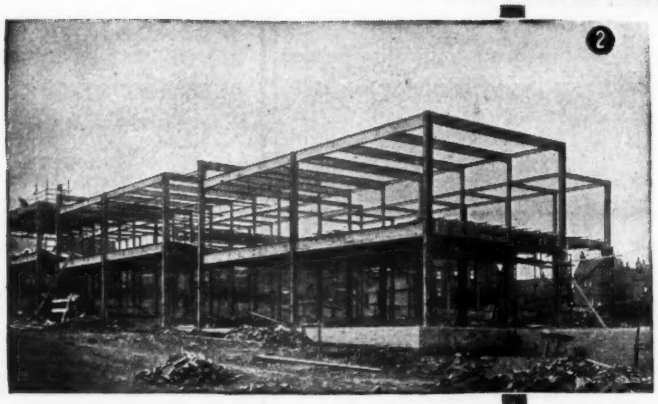

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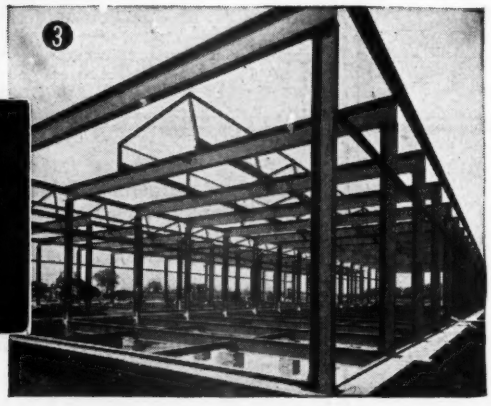

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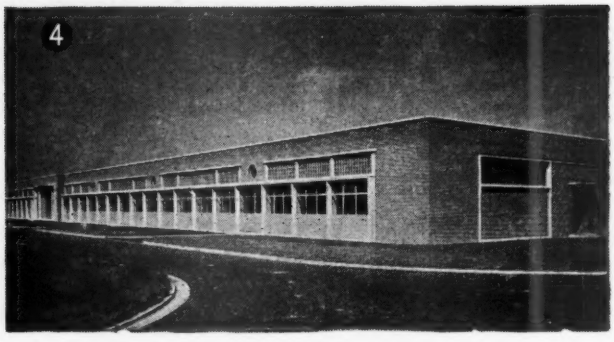

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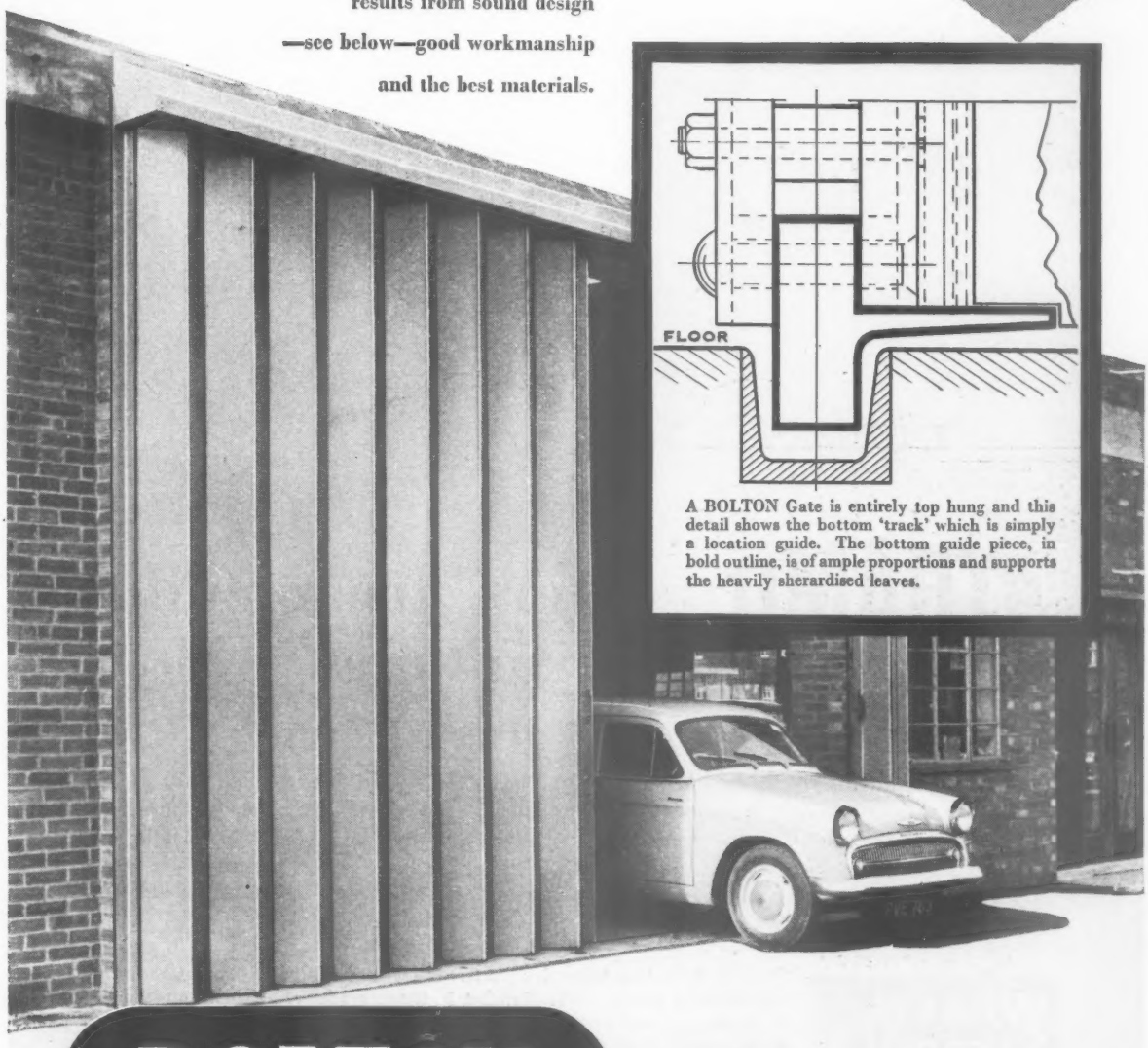

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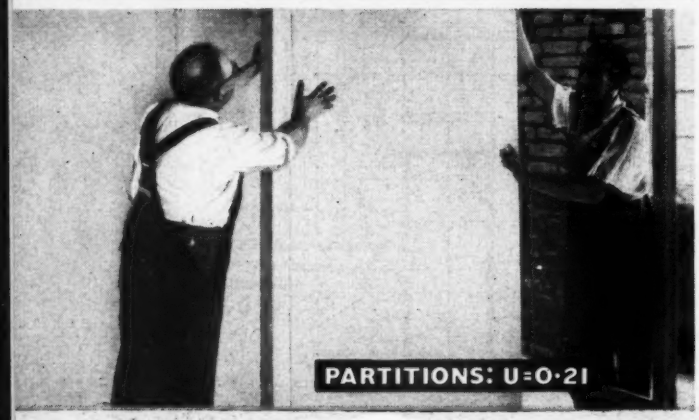

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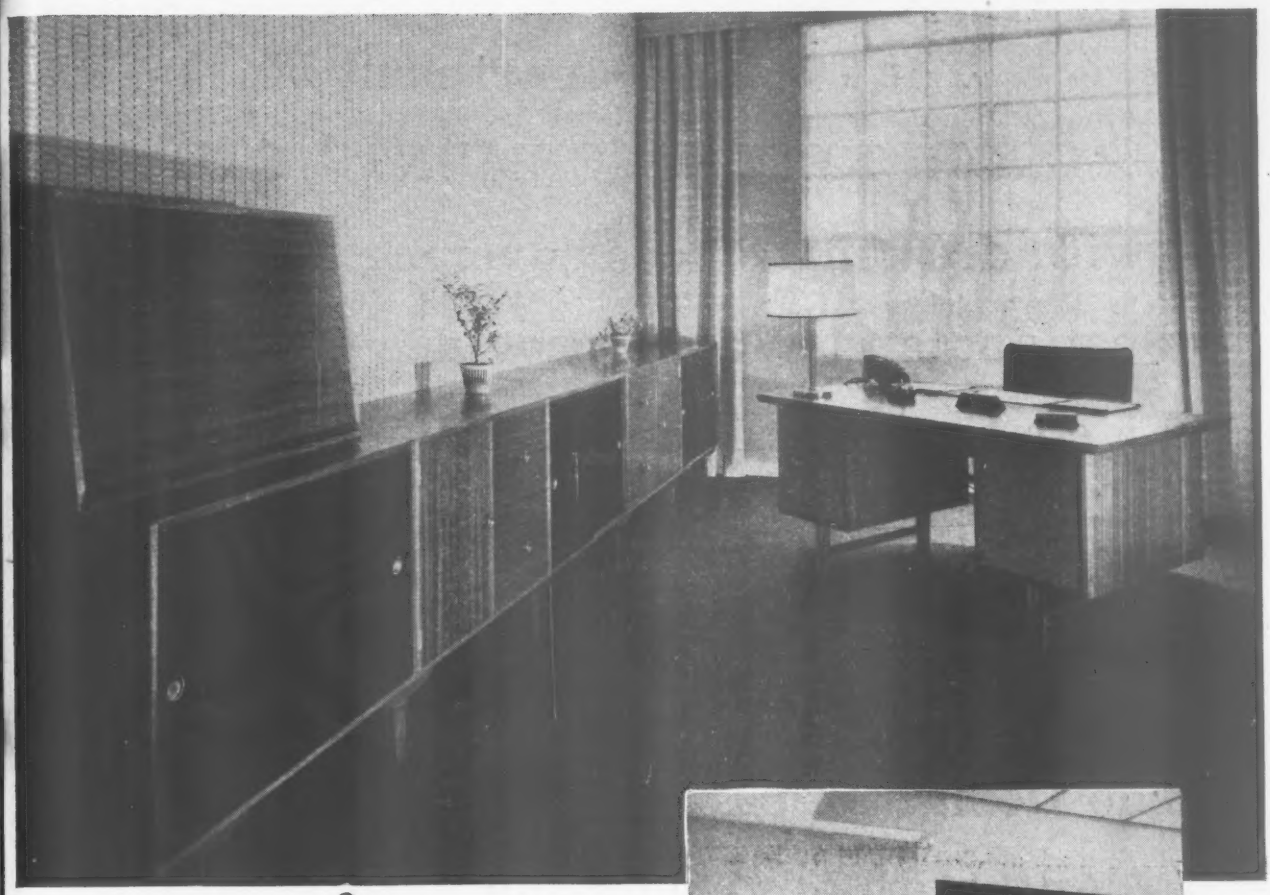

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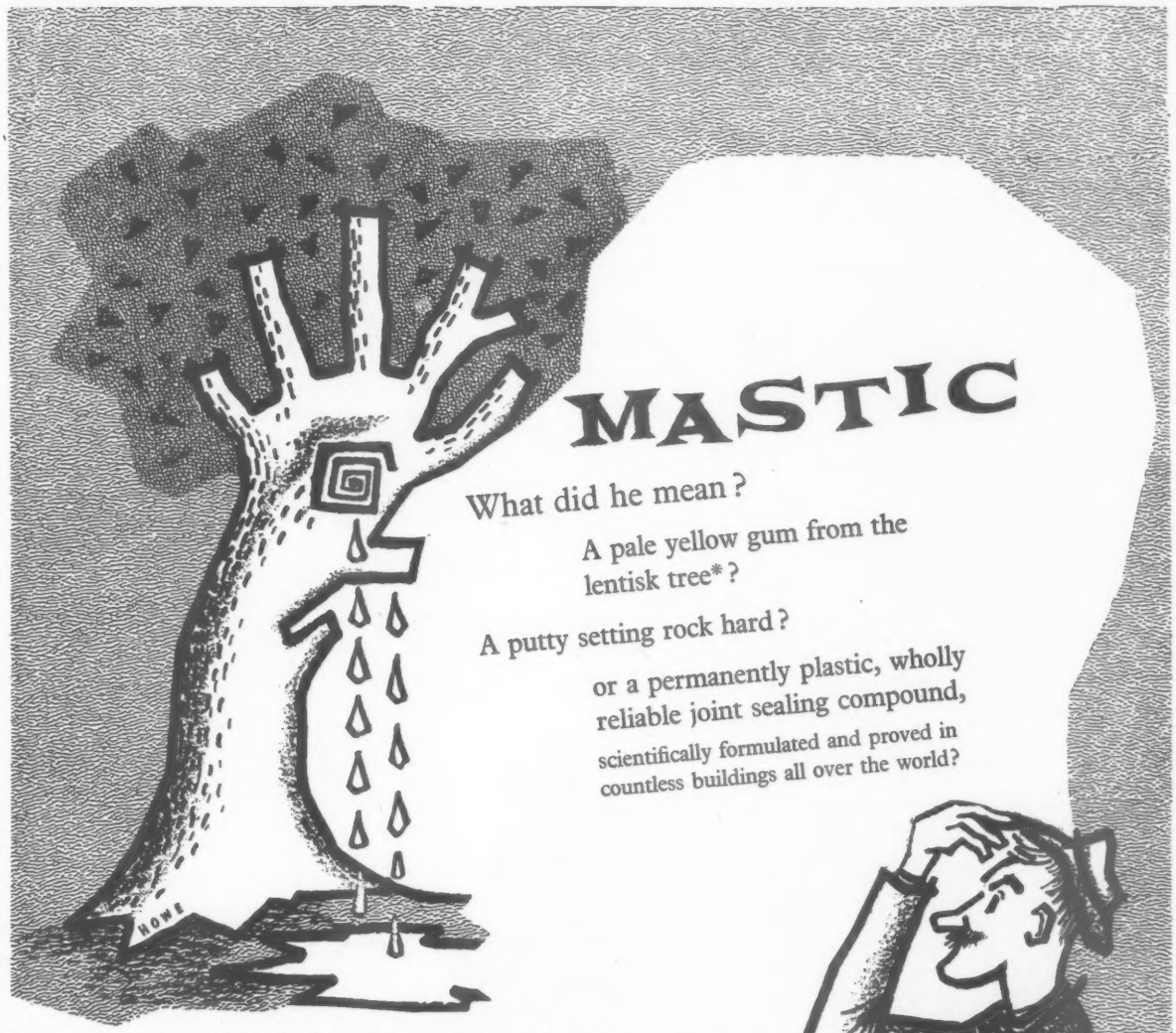

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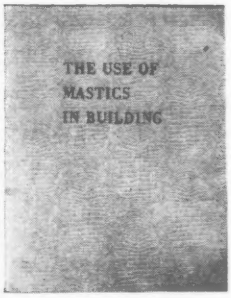

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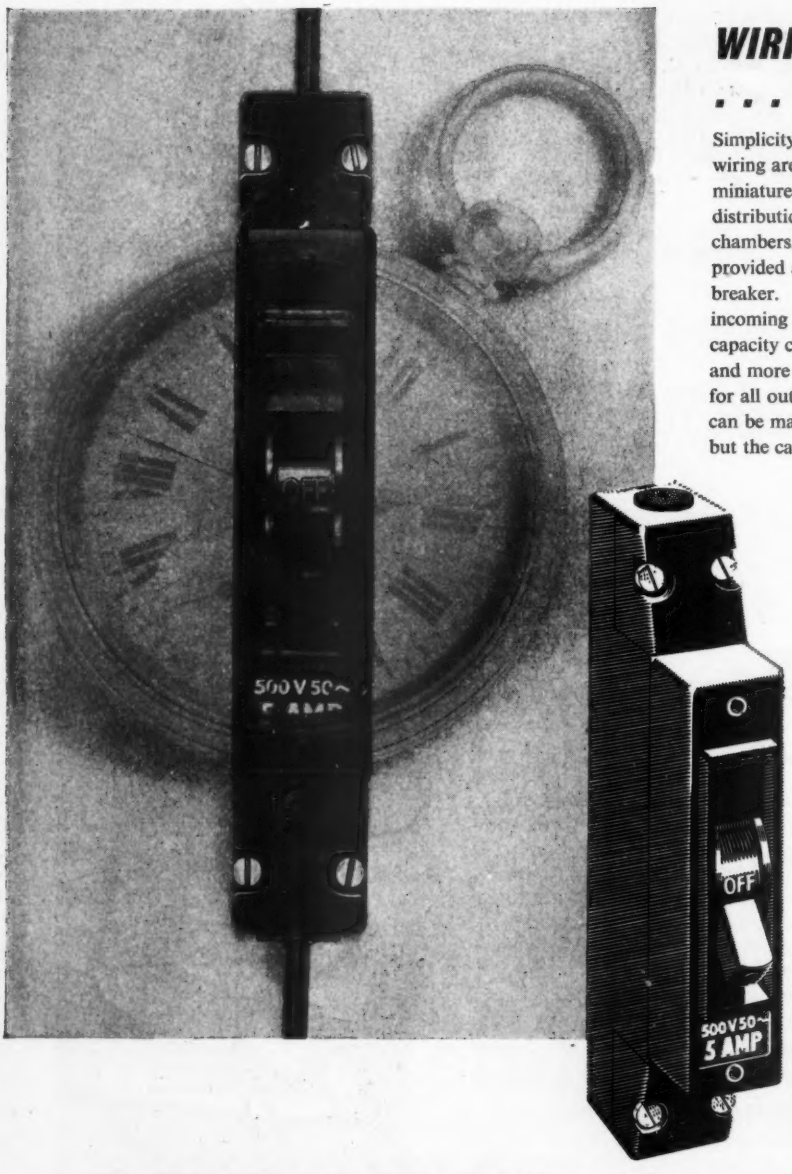

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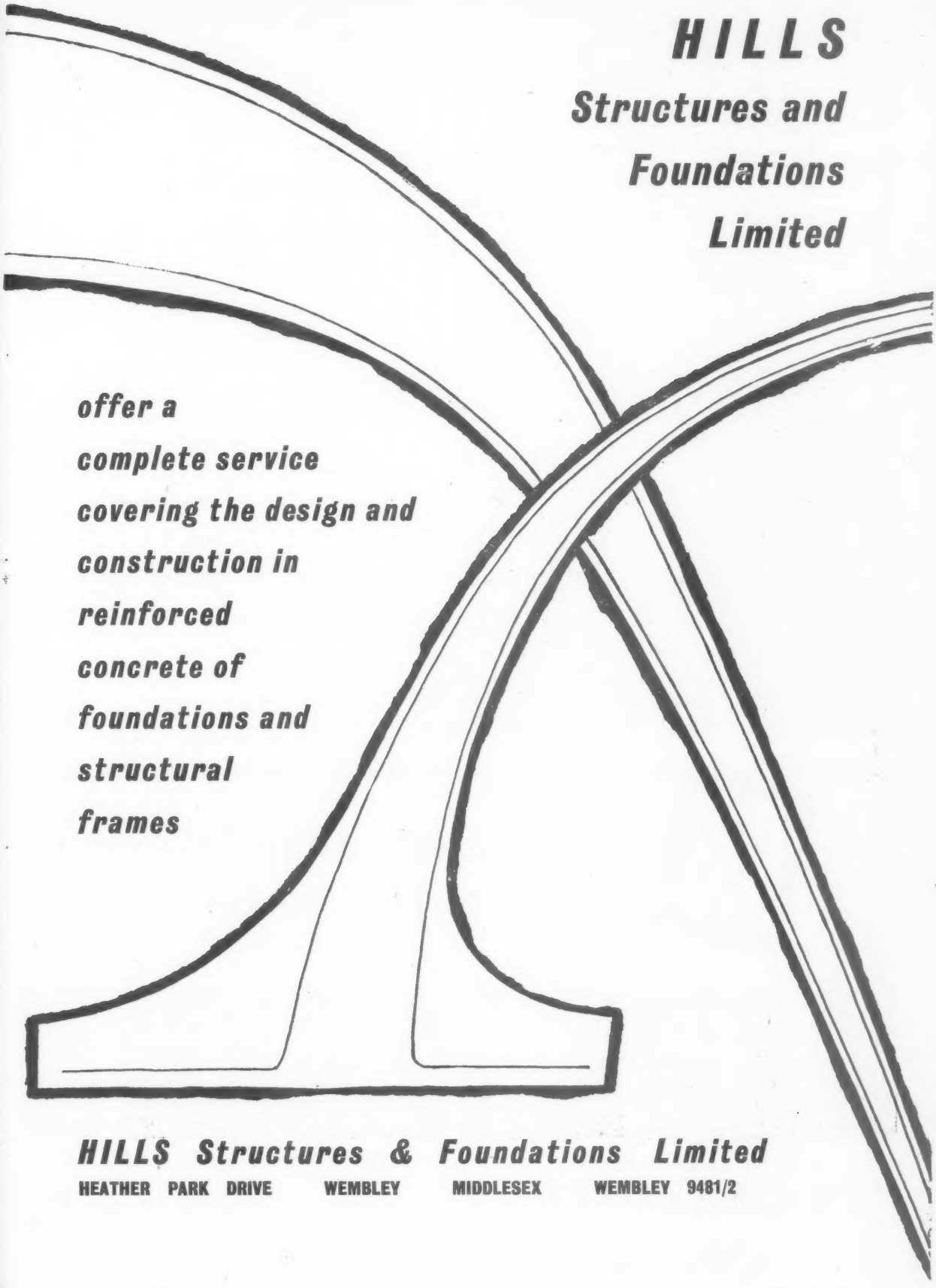

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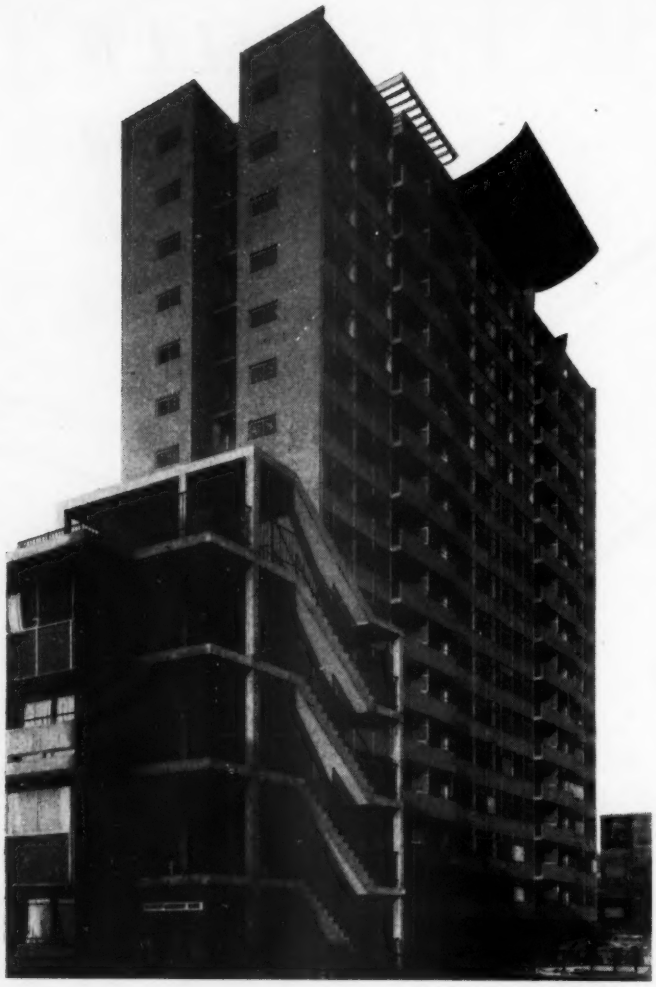

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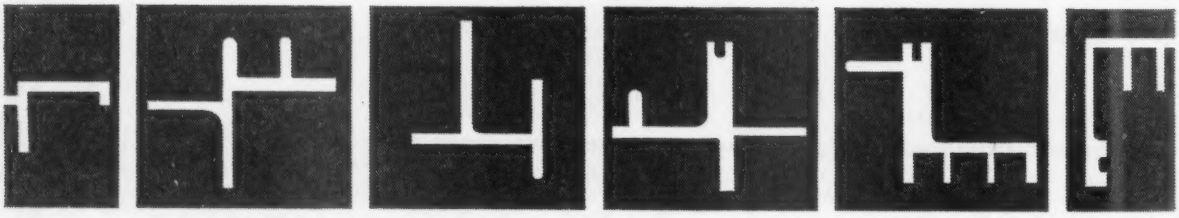

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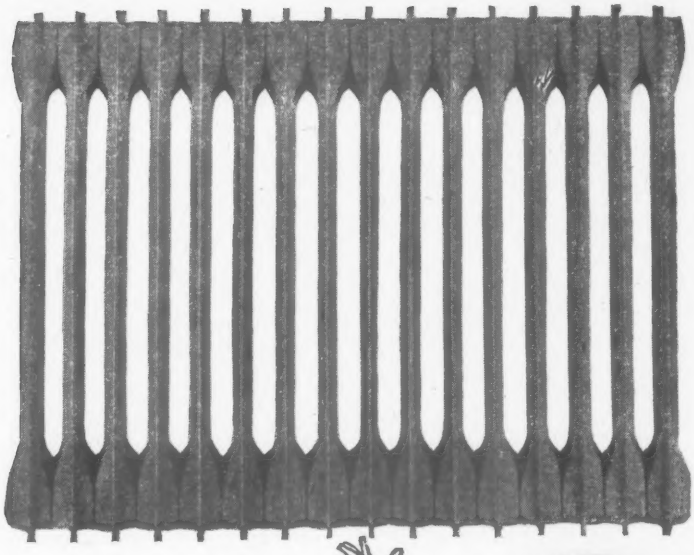

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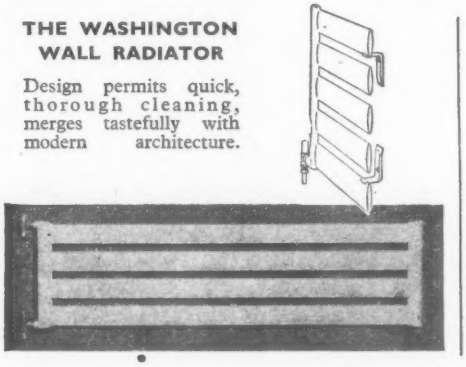

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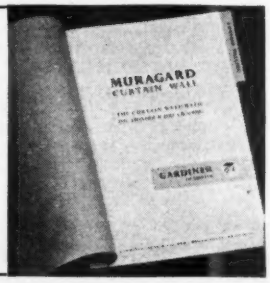

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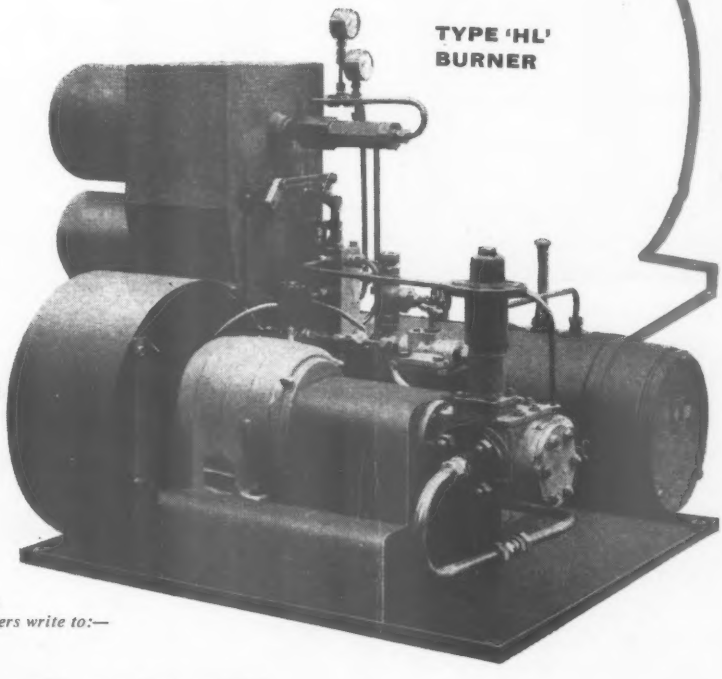

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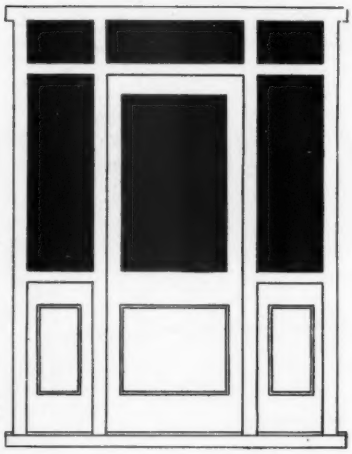

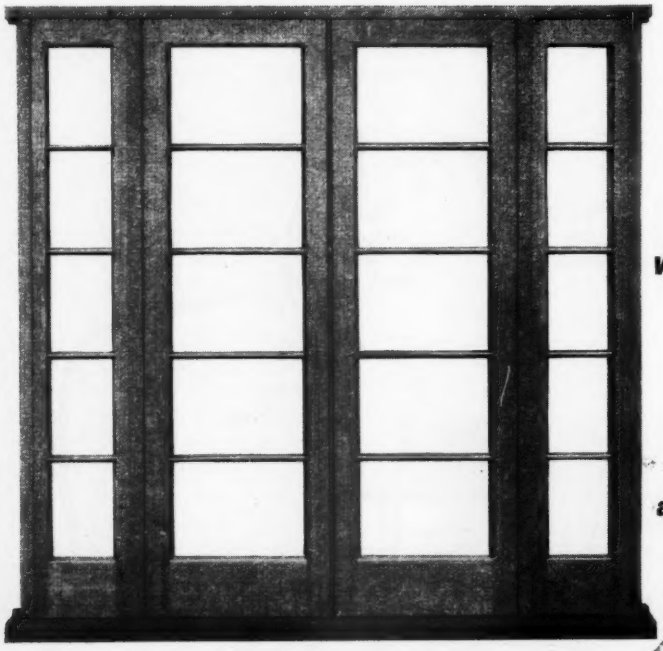

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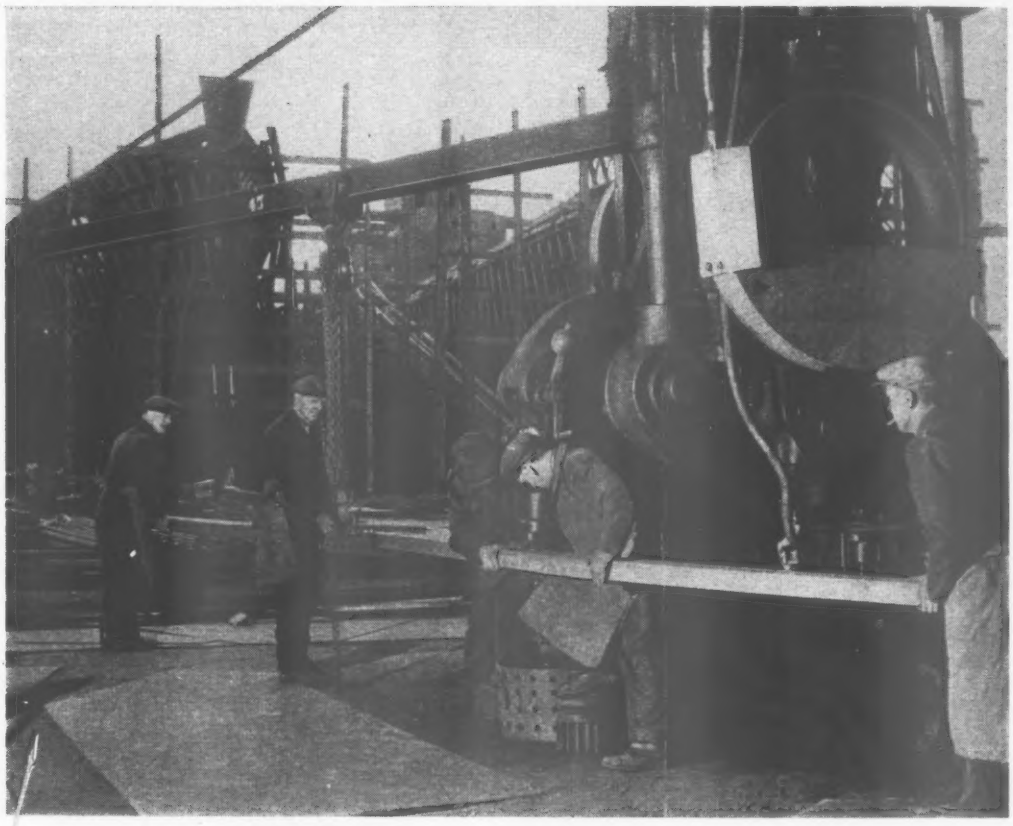

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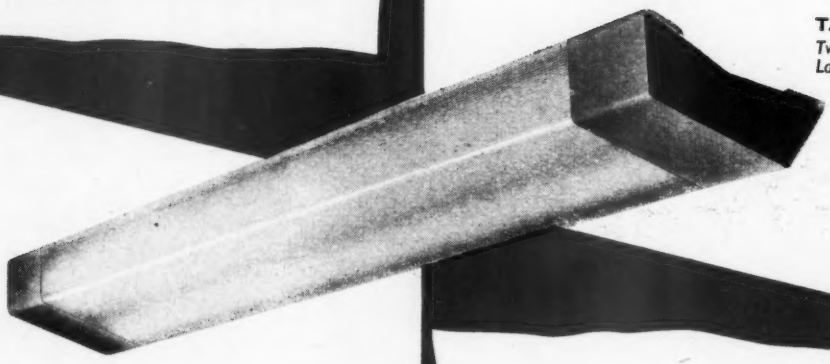

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NOT QUITE ARCHITECTURE

THE CITIES OF THE PLAINS

The other evening at the AA, Professor Gordon Brown ranged widely among the cities of South-East Asia, and in the hour he talked he needed to travel fast to cover this great sub-continent of islands and archipelagos—surely almost the last playground of innocence in the world—far bigger than the Mediterranean basin, stretching from Burma to Bali, and yet possessing no more than half a dozen towns worthy of the name of city.

*

However, in the last 30 years, and more noticeably in the last decade, these few cities have grown at a formidable rate, doubling and trebling themselves in population and quadrupling their areas almost unconsciously. I suppose of these only Singapore and Hongkong, and now Kuala Lumpur, have real plans in operation. Some of the others like the former Dutch towns of Indonesia and the French towns of Indo-China once had formally planned cores, but these are breaking down or being swept aside by the tide of expansion.

*

Many of these cities have "paper" plans . . . conceived in the minds of some visiting UN or British Council consultants, but still-born in the Mayor's parlour whose walls they probably adorn. What they lack is the simplest, most primitive planning control, as primitive as zoning or fire regulations. These exist, no doubt, but are not enforced and in reality thousands of buildings are built of timber or worse, every year with no proper drains or water supply, let alone with roads and street lighting, and far less complying with building lines. Delta cities like Bangkok and Rangoon spread out along the rivers and the plains for hundreds of square miles, far beyong the capacities of their overtaxed authorities to supply them with services or to prevent the fires which every year or so sweep through their vast shanty suburbs. Bangkok has a beautiful and well-kept old city around the palace but beyond this canals and roads stretch everywhere and nowhere into the rice lands of Thailand.

Discovering The Secret of Urbanity?

Eric Lyons, whose talk at the RIBA this week on spec. building is reported on page 458, suggested that he might have been invited as an Awful Example. His work in fact stands out as a shining example in this field. Parkleys estate, Ham Common (above), illustrates two of the principles which, Lyons says, have guided him: the use of simple buildings involving the highly repetitive use of structural elements and equipment; and largely avoiding streets by creating courtyards and varying patterns of "external enclosures." Here, he believes, lies the secret of urbanity. There is no solution, he also believes, to the æsthetic problem of the individual house. The key to his success in speculative building is the firm control by a single architect of the planning and landscaping of an entire estate, in contrast to the endless repetition of individual houses. Eric Lyons will be one of the speakers at the RIBA symposium on speculative house building on May 2: this should prove an opportunity to carry forward the discussion of some of the challenging and provocative ideas he puts forward here.

I have often thought it must be the easiest city in the world to conquer and one of the most difficult to occupy. It is a great bustling, thriving city and if Singapore can be seen as the London of this continent, Bangkok is its Paris.

*

Rangoon, less bustling today, is none the less a growing city. Potentially, with its lovely royal lakes and golden Schwedegong Temple, it could have been a very beautiful city, and I believe before the last war it was a show place. Today, its centre is shabby and ill kept while its vast shack slums suck at the roots of its vitality. Much of this is no doubt due to lack of money and expertise; and I think the Western world, if not the whole world, must bear some of the responsibility for this aspect; much of it is due to the lack of a proper housing authority, for it is housing, as must have been realized, that is beyond control. But much of it is due to a certain attitude of mind and this is the most difficult problem to solve.

*

I have already hinted that Hongkong, Singapore and Kuala Lumpur have operating plans and by implication are better cities. Indeed they are models of their kind but in case this should be seen as a confirmation of the benefits of colonialism, I must add that proud as one is that these cities are so fine, they have all had very prosperous times since the war, two of them are dominantly Chinese, and the attitude of mind I talk about is perhaps less dominant in the Chinese than the South-East Asian mind. This attitude is simply a reluctance to proscribe, the ultimate gentleness, the supreme anarchy which results in a social democracy so mild that it is felt to be almost as harsh to curb the exploiter (the little man with the shop on the pavement) as the exploited—the public who use the pavement.

*

Urban planning implies discipline and denies expediency and yet to the South-East Asian personal relationships are of far greater importance than material results, especially long-term results. He is reluctant to imperil abstract good will for the sake of material results which do not seem at all important to him. He has still to learn that without some basic rules no city can survive, and men, let alone good will, are in peril. It is also still more praiseworthy in the eyes of S.E. Asia to contribute something new rather than preserve what exists, especially if what exists represents a former colonialism. That is why one will find many brand new pagodas alongside far finer crumbling old ones; many new hotels, schools and roads when the old ones are in disrepair. Planning is like maintenance, immediately unrewarding.

*

Perhaps at back of it all lies the rapid change from ruralism to urbanism. The personal code of the village breaks down in the larger complex of the city and needs to be replaced by rules. These cities are being lived in by first generation villagers. It will be a little time before they accept the need for such remote or impersonal control.

FELLO ATKINSON

The Editors

SAND FOR CONCRETE

BRS Digest No. 108, *Sand for Concrete*, deals with a matter of very considerable importance, for even in these days of prefabrication and modular co-ordination, sand for concrete is used to some extent on virtually all jobs.

The Digest for the most part deals, with the familiar matters of grading, cleanliness, particle shape and the like. It places considerable emphasis on the proper grading of sands and describes very clearly the reasons for the importance of this and explains the reasons why the revised BS Code of Practice CP114:1957 allows a wider range in the coarse to fine aggregate ratio in order to take advantage of the grading changes made in BS 882:1954, *Concrete Aggregates from Natural Sources*. The Digest also gives a clear description of "gap-grading" which may be something not too well understood yet by architects.

All this is very fine in theory but architects seem to find in practice that on the ordinary run of small and medium-sized jobs it is extremely difficult to get any guarantee from the suppliers that sand conforms to the BS and the average small and medium contractor still looks aghast if asked to provide evidence of conformity with the BS. Surely it is absurd for samples of sand to have to be sent to a testing laboratory for checking. (In practice, of course, this very rarely happens.) Either the quarries should be able to give a guarantee, or the builders should have available the quite simple apparatus required for testing.

Would either the builders' organizations or the Ballast, Sand and Allied Trades Association care to comment?

DISCRIMINATION AGAINST SALARIED ARCHITECTS

In recent weeks the Chancellor of the Exchequer will have been manipulating his millions, and we shall soon see the outcome in a new Budget. Substantially, he is all too likely to recoup in taxation from one quarter whatever concessions justice or expediency may cause him to offer in another. Yet it sometimes happens that a major grievance goes unredressed from year to year when the cost of relieving it would in fact be negligible. The deduction of expenses under Schedule E is a case in point.

Everyone knows that the professional man in private practice may successfully claim for car, books, telephone, hospitality, protective clothing, professional subscriptions and the like, whereas the salaried man (under Schedule E) doing the same job is either ineligible or dependent upon grace or good fortune if he is to get the same treatment. On professional subscriptions, for instance, he will normally need to prove that membership of his professional society was not only an initial condition of his appointment but remains a continuing condition of his employment—a contention that many public employers are not willing to corroborate. Yet if a man is

to keep abreast of his subject and his profession, it is almost essential to belong to that society which is central to his standard of professional competence, in terms either of ethical conduct, entry qualifications, further training, licence to practice or, probably, a combination of these factors; and it is wholly anomalous that some accident of occupational category should determine whether or not he gets tax relief—as the leading professional societies (including the RIBA) have pointed out in some cogent arguments recently put to the Government.

The snag so far has been the difficulty of defining both "the professions" and those expenses which are "reasonably incurred for the appropriate performance*" of one's duties. However, the Government tacitly admitted in the House last July that the *major* professions have the strongest case, and the hunt for a neat form of words to identify them and to exclude others should not be allowed to delay any longer an amendment that is much overdue. Failing watertight definitions, the Government should simply list and briefly describe the major and obvious societies whose subscriptions are to be allowable, and leave it to lesser societies to argue themselves into the same category if they can.

* Report of Royal Commission on Taxation of Profits and Income (1955).

TAKING THE LID OFF

Because ASTRAGAL doesn't know much about the law he went to the Hatfield public enquiry expecting to hear within a day or so why the roofs blew off. There has already been a private technical enquiry (without benefit of lawyers) and, if rumour is correct, the only reason why a report has not been published is that lawyers said it would be libellous. So there had to be a public enquiry at which, apparently, what would otherwise be libellous could be said with impunity.

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At a public enquiry everybody concerned has to be represented, at vast cost, by senior and junior counsel; everything has to be said twice—once by counsel and once by the witness; every document has to be formally produced, spoken to and listed; every fact, however obvious, has to be formally stated. Michael Rowe, QC, who is holding the enquiry, said he was ready to sit for a week and a half, and when at the end of the first day the lawyers had only disposed of one meteorologist and half a quantity surveyor ASTRAGAL began to understand why.

•

These methods have their compensations. The enquiry is obviously very thorough. And judging by the questions which counsel agreed Michael Rowe would have to answer in his final report, its outcome should be of importance in determining the responsibilities of architects and builders. However, these questions do not include one about a weakness the JOURNAL has already mentioned—that the BSI Code of Practice (3, Chapter V, 1952) does not recognize explicitly the existence of the monopitch roof type, but gives the dangerously misleading impression that a monopitch roof may be considered as one half of a double pitch roof. Let us hope this does not escape Michael Rowe's attention.

MR. SPRAGG'S SUCCESSOR

C. D. Spragg, the secretary of the RIBA, is retiring at the end of the year. Just lately my grapevine has been buzzing with the news that the council is not going to promote one of the staff. Instead—and I hope I have it correct (you know what these buzzing grapes are like)—the job will be advertised at about £4,000 a year. That sum will attract many worthy types, such as prematurely-retired admirals and generals. But what the RIBA really needs is a forceful, adaptable man who can understand the problems of the profession, sympathize with the views of the younger and more progressive members, and help the Institute over its difficulties at a tricky time.

TOMMY STEELE TO SING WITH BEECHAM?

ASTRAGAL'S grapevine, usually to be seen in a corner of the AA dining room, has also picked up the story that Reyner Banham is to be architectural correspondent to the *New Statesman*. This is good news, because the paper has acquired a reputation for indifference (and even hostility) to architecture since John Summerson ceased to be a frequent contributor. Mr. Banham is neither indifferent nor hostile (though he may pretend to be) to the profession. He tells me that his articles should be appearing about once a month—so compared with painting, films, theatre, etc., the Mother of the Arts will still be getting a fairly raw deal. Still, it is a beginning, and as Reyner Banham himself said, hurriedly consulting his notes: "The 64,000 question is: how are those Great Turnstile egg-heads going to respond to my standard, fast-spieling brand of crazy mixed-up, real-gone, bop-talk; old-time historical erudition, and tech-words but from far out?"

YOU, TOO, CAN HAVE AN OLD BODY

One of Mr. Banham's pet hobby-horses, the annual changes in US car

styling, is taking some nasty knocks at the moment. An article in the American magazine, *Industrial Design*, asks "Is This Change Necessary?" Another notes that the Chrysler Corporation, which made nonsense of annual model changes by rushing them through two or three at a time, has now made further nonsense of them by hardly changing them at all for 1958. Its products are being advertised as so good that they don't need changing.

*

Even if the current recession doesn't wipe the dollar grins from Detroit car faces, it is surely going to make them look rather fixed. And you Americophiles this side of the Atlantic will have to start revising your ideas again, again, again . . .

NOT KWAI ARCHITECTURE

For some time now Cambridge has been leaking the news that Trinity has a rebuilding scheme—*not* the Powell and Moya one—and that the worst can be expected. But the senior Bursar's published statement of the college's intentions is in such mandarin English that ASTRAGAL can't think just what those intentions are. It certainly seems that the rebuilding will barely show on the outside of the College, and will offend only the eyes of those inside.

*

What seems particularly mandarin about the Bursar's statement is the way he commends the architects of the conversion, Husbands of Sheffield, to his fellow Trinitarians. Here is a quotation, with few excisions:

*

The architect who has toiled indefatigably to overcome the difficulties of the site . . . is Mr. J. S. L. Smith, ARIBA, who comes from Darley Dale, where his family firm quarries the fine hard local mill-stone grit; he kindly tolerates the softer, less enduring oolites to which we are accustomed in these stoneless parts. Husbands tackle a variety of projects . . . the headquarters of the British Iron and Steel Research Association . . . Jodrell Bank Radio Telescope . . . small houses on awkward sloping sites in the north of England . . . and the Bridge on the River Kwai . . . elephant labour was used for the construction, and the firm both designed and blew up the bridge. . . .

*

But suppose that last bit sets a precedent? Suppose the new work is only just completed when a commando of dissatisfied Trinitarians fights its way through from the Lecture Room block and . . .

ACTION FROM POWER

One or two people seem to have dismissed Richard Hamilton's "Gallery for a Collector" at the Ideal Home Exhibition as pure fantasy, because no one could afford to collect those enormous action paintings. If you want proof that they can and do, then go to the ICA where you can see eleven substantial pictures by names like Pollock, Rothko, Dubuffet, Kline and so on. These come from the private collection of E. J. Power—the power behind Murphy Radio.

*

After the recent outbreak of home-brewed action paintings by young contemporaries and old convertibles, it is salutary (as they say) to be reminded what the real stuff looks like—just how subtle, as well as loud, are the colours of Pollok; just how certain, as well as bold, are the enormous brush strokes of Kline.

SPUR

Just over a year ago the ABT's Housing and Planning Committee organized a very provocative and stimulating little conference at the AA on the subject of "housing the city dweller." A proposal was made, and unanimously supported, that an organization should be set up to develop further, and promote, ideas on urban reconstruction. After a year of discussion and negotiation a new body has been formed, under the stimulating title of "Spur," which means: the Society for the Promotion of Urban Renewal. Very appropriately the society will exist under the ægis and sponsorship of the Housing Centre, and at a recent meeting HC president Sir William Holford and chairman Judith Ledeboer both gave the society their blessing.

*

The inaugural meeting of Spur was attended by nearly every architect-planner of note in the country, and quite a few eminent planners and sociologists, and all seemed to be aware of, and to support, the need of a body to investigate methods of re-invigorating urban living. ASTRAGAL hopes that all architects, planners, economists, housing managers, sociologists and everyone else interested in studying the problems of our towns and cities, who are anxious to make them places in which citizens can enjoy a vigorous and full life, will give this important new venture every possible support.

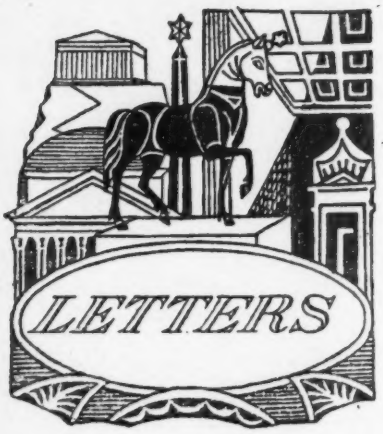
Trompe d'oeil effects in interior decoration, of which the last talented exponent was Rex Whistler, are now a rarity. ASTRAGAL *therefore welcomes this pleasantly whimsical example executed for a dining room at the Caledonian Hotel, Edinburgh, by Roger Nicholson, assisted by Jehan Dahly and Gordon Davies. The Nicholson brothers, consulting designers for British Transport Hotels, were jointly responsible for redecoration of the public rooms in this hotel.*

HOME GUIDE

I have been reading a new book on the home—the place where (according to Sir Hugh Casson) we make an exhibition of ourselves. Casson says this in a brief foreword to *Space, Texture, Pattern, Colour*,* written by Lionel Brett. Mr. Brett has produced a guide not to current cliches but to sound principles of home decoration. An excellent little publication, but what a pity all the picture captions are placed in a bunch at the end for the sake of a pretty layout.

ASTRAGAL

*Bevis 1s. 6d.



Colin Boatman, A.R.I.B.A.

Edward H. Hartry, A.R.I.B.A.

Alan Emmerson, A.R.I.B.A.

and Harley Sherlock, A.R.I.B.A.

Peter Jay, M.A.

N. C. Sidwell, M.Sc.

Elevational Control

SIR,—May I be permitted to enter the controversy on elevational control on the "wrong" side? I want to suggest that those of your correspondents who have been fulminating against control, and those who sympathise with them, would be taking a very different attitude if local councils throughout the country were consistently throwing out badly designed and mock historical buildings and insisting on buildings which we should call well designed and suited to our times.

Some may say that this begs the question because such a situation is impossible. Let me come to that in a moment. If what I say is true, it follows that your correspondents are not against control as such, but against the way that control operates *at the moment*.

The fact is that in this small island we cannot afford *not* to have control of some kind. Too many in the building game are concerned, not to achieve the finest possible physical surroundings, but the highest rate of profit, and, let's face it, there are those in our own profession who are more interested in the lift provided for their egos by a splash in the architectural Press than in the orderly visual development of our country. We should not forget that plenty of crimes have been committed in the name of modern architecture and not every "unconventional" design is automatically good.

Which brings me to the question of who is to decide what is good and what is bad. Of course your correspondents are convinced that they know best what is good. (Certainly the whole profession would not agree, but let us assume for the moment that, broadly, the modern movement, with all its different trends, represents the majority of the profession). The local councillors are equally convinced *and equally* sincere in their opposition to what seems to them an alien and doctrinaire aesthetic. The whole problem lies in the resolution of these two opposing viewpoints. How can it be done? Not, I submit, by shooting (or even gagging) all councillors and instituting an architectural dictatorship, nor by inspiring contempt for these "ill-informed and untrained" laymen.

In the past the architect has been able to build well because his client or patron has been a man of culture, but the patron has always been one of a minority group. Now, increasingly, the client for architecture becomes the whole population and the task becomes the raising of the cultural level of the whole population to the point where they and their representatives demand good architecture. To the extent that this is done we produce an atmosphere in which fine building is possible; therefore it is a task in which the architect, both as architect and as citizen, must play his full part.

Hard and long? Of course, everything worth achieving has had to be struggled and worked for. An idle dream? No—after all, LCC housing and schools, respected throughout the world, have passed through the mill of lay committees. If it can be done there it can be done elsewhere. One final point. I believe that when we finally achieve such a situation we may find that the untrained (but no longer ill-informed) layman may even have some contribution to make to architecture.

COLIN BOATMAN.

London.

SIR,—Beneath its tone of gently offended dignity, Mr. Ryder (AJ, March 13) presents his case very well indeed. "Protection of the majority against the outrage committed by a minority" sounds so beautifully impressive, though perhaps a tiny bit pompous? I only wish it were true. But surely we all know that the outrages committed by spec. builders pass automatically (the same mixture as before), the "obviously bad" botches of the local builder get by (old Jones is a good man and does his best), the Borough Surveyor's lamp-posts and public conveniences don't even come under planning control, but the wicked architect (long-haired chap) ought to know better than to be "out of harmony!"

Mr. Ryder tries to defend elevational control as the natural outcome of a democratic form of government. If by democracy one means the suppression of individuality by the judgment of the "common man," Mr. Ryder is absolutely correct; who can be better qualified to judge and to condemn the "obviously bad and the obviously grotesque" than the civil servant and the members of the lay (and how!) committee?

From the architect's point of view, apart from the stultifying effect of having to design in a manner acceptable to those incapable of designing themselves, submission of plans wastes a considerable amount of the architect's time and the client's money, and in housing makes it even more difficult to build without either skimping or losing more time than one can afford. And how can the client have respect for the architect after seeing his more ambitious designs squashed by the local authority and reduced to something not far remote from the spec. house opposite?

If, at this stage, it is not possible to abolish elevational control, would it be possible at least to try to exempt qualified architects from it?

EDWARD H. HARTRY.

Teddington.

SIR,—On February 6, 1958, we submitted an application for Town Planning permission to the Battle RDC for a small house in Ticehurst. In February 27, 1958, we received a letter from the Town Planning Officer stating that the Committee were not happy with the appearance of the house but that the Committee might be won round if we were prepared to revise our scheme. Figure A shows the front elevation as revised by the Town Planning Officer. Figure B shows our original elevation together with the plans.

It seems to us a particularly extraordinary example of the workings of elevational control. Irrespective of the merits of either elevation, both are modern, both have pitched roofs, both use precisely the same materials. We make no claims as to their respective merits, but one is our elevation, the other happens to be that of the Town Planning Officer.

Are there no forms of protest against the workings of the Act which, it appears, quite frequently leads to situations of this sort? One would like to be able to sue the local authorities for loss of fees on time wasted on elevations. Why did the RIBA fail to protect the professional status of the architect during the passing of the Town Planning Act and its subsequent operation over the last 11 years?

Cannot one, even at this late stage, take action within the RIBA against any Town Planning Officer who does not support up to the hilt the "elevational treatment" of a fellow architect, thereby making the status of the whole profession ridiculous in the eyes of the layman? Is he not guilty of unprofessional conduct in that he contravenes Section 1 of the Code: "A member or student must not hold, assume or consciously accept a position in which his interest is in conflict with his professional duty." Although a Town Planning Officer might be extremely courteous and quite clearly anxious to help the architect in receiving permission, if the result is merely the best possible compromise, mediocrity will result. It is the Act itself which leads to this absurd situation.

Although we agree with the broad principles of the Act, as it works at the moment, positive planning is a pipe dream and negative planning is rampant. Whilst various schemes might be devised to stop the spec. builders' worst and encourage the architects' best, the time is not ripe for a good old British compromise. To date, the workings of æsthetic control have been negative and produced only mediocrity, as can be seen from the ribbon development now proceeding at the other end of Ticehurst, our case in point. It is therefore an urgent necessity that the sections on elevational control be cut out completely before the whole of the Act is brought into disrepute.

ALAN EMMERSON.
HARLEY SHERLOCK.

London.

"Vilest Journalese"

SIR,—Architects, who suffer so much from foolish and uninformed criticism from the laity, should be particularly cautious in comments on matters outside their own specialist knowledge. For this reason, I find it hard to understand why you find Reyner Banham's comments on a Bristol University production (AJ, March 13) worth publishing.

Let me say at once that I have not seen the production in question, I hold no particular brief for the Theatre in a Fives Court, and have no particular sympathy with homosexuals. On the other hand, I do have some specialist interest in the theatre, and do not feel that Mr. Banham's effusion is in the best of taste.

In the first place, it is very difficult to determine precisely what he is trying to say. Having sneered at the production for three paragraphs, he tells us that he "wouldn't like to say" what it was like, and then proceeds to do so. After some cheap comments on the acting he shows, in his penultimate paragraph, that he is, in fact, perfectly well aware of the function of productions of this kind. If the earlier remarks are vulgar, the later, in your magazine, are impertinent. How would Mr. Banham react to comments of this kind on architecture if they were published in a theatre magazine?

Ground floor plan and elevations. B, top, as designed by architect and A, bottom, as designed by the planning officer; see letter from Alan Emmerson and Harley Sherlock.

Quite apart from the content, the whole column is written, not in English, but in the vilest journalese and deserves to rate with Nancy Mitford's criticism of Le Corbusier, and Lady Violet Bonham-Carter's regrets that modern windows are no longer like Georgian windows. This, however, is what we have learned to expect from Mr. Banham.

PETER JAY.

London.

Reyner Banham replies:

As one who has to read volumes of uninformed, vulgar and impertinent criticism of architecture in non-architectural publications, I might well have found revenge rather sweet—but if Mr. Jay will imagine a piece by, say, Kenneth Tynan in, say, *The Stage* about a bright fourth-year student's scheme at the AA, he may perhaps see why I felt it worthwhile to describe (not criticize) the impact of this performance before drawing the parallel with architecture in the last paragraph.

Educating Craftsmen

SIR,—Builders and building educationists seem to have been coming in for quite a bit of criticism in your columns just lately. Certainly your Technical Editor struck hard in his comment under Mr. T. Foster's letter of December 19 when he accused building educationists of "devoting too much of the energies of their students to making superlatively well what most of them will never be called upon to make again."

The future prospect for craftsmanship in building is by no means clear. It certainly worries me because I cannot imagine that in 1978 we shall be seeing in our new buildings wiped solder joints, plaster cornices, curved wood handrailing, intricately bonded thick brick walls, laced valleys in tiled roofs, etc.

The great difficulty is to make up our minds whether in twenty years or so, our building craftsmen, as we now know them, will become as scarce as blacksmiths or thatchers, and if so, will there be skilled craftsmen of the new era or, and this may be considered sheer heresy, will there be instead, squads of semi-skilled "fixers" or "erectors"?

Whatever happens in twenty years' time it is manifest that at present, and for some considerable time ahead, we require men skilled in working with clay products, concrete, timber, metals, paint, plaster, etc., and for the few hours of instruction, rarely more than 100 hours in a year, which students in college workshops receive, it is surely reasonable for them to have an opportunity to develop craft skill through the medium of traditional work.

When your Technical Editor writes about the craft institutes training students to make the parts of good modern buildings I am not sure what he would have us to do for it is difficult to replace workshop instruction in, say, carpentry joints with a lesson in the use of timber connectors; or to dispense with skill in laying facing bricks and substitute instead the technique of fixing a panel of exposed aggregate, or again to drop instruction in soldered lead joints and teach instead the art, if there be any art in it, of making compression or capillary joints in copper piping.

It is chiefly in the teaching of craft technology and science that the craftsman should be learning about the use of new materials and techniques, and I think you may be sure that the building educationists under the guidance of the City and Guilds of London Institute are taking care of this in the general revision of craft syllabuses which is taking place at the moment.

May I now say something about your editorial of January 23 criticizing the muddle of building education. There's no doubt at all that we are in a muddle and have been for a very long time. This, I think, is largely due to the absence for so long of the influence of a single, strong institution responsible for the higher levels of building education and the maintenance of professional standards—an institution that will do for builders what the RIBA has done for architects.

There are unmistakable signs now that the Institute of Builders is at long last awakening to its responsibilities in this respect and perhaps we may hope to see in the near future rather more encouraging evidence of its awakening than the Report of the Board of Building Education which you so rightly criticize.

One last word with reference to the first part of your editorial of January 23 where you ask what should be the system of training for the industry as a whole and whether architecture should be taught at a university, college of technology, or art college. You know if you follow the exhortations of so many architects at RIBA conferences for architects, builders, and surveyors to train together as one happy team, you should have no difficulty in answering this question because most builders and surveyors and some architects are already training in colleges of technology. Would it be a trifle presumptuous, coming from a muddled builder educationist, if I suggested that you took another look at the report of the London and Home Counties Regional Advisory Council on proposals for a College of Advanced Building Technology containing separate schools of architecture, building administration and technology, surveying, structural engineering, and town planning? I seem to remember that these proposals received a lukewarm reception from the architectural press, possibly because they were not put forward by the "leaders of the team," but, quite frankly, do you not feel that these proposals go a long way indeed towards the simplification and unification of training in the industry?

N. C. SIDWELL.

DIARY

The Preservation of Georgian and Victorian Architecture. Talk by John Summerson. At the RICS, 12, Great George Street, S.W.1. 5.45 p.m. MARCH 31

How Successful is Counter Attack? Talk by Ian Nairn. TCPA meeting at the Planning Centre, 26, King Street, W.C.2. 6.30 p.m. APRIL 14

Presentation of RIBA Gold Medal. At the RIBA, 66, Portland Place, W.1. 6 p.m. APRIL 15

The Organization of Joint Maintenance Schemes in Conjunction with Modern Development. Talk by G. P. Townsend, Director, Span Developments Ltd. At the HC, 13, Suffolk Street, S.W.1. 6 p.m. APRIL 22

A recent photograph of the BBC Television Centre at the White City (architects, Norman and Dawbarn) showing the progress made with the main block, which covers 3 acres.

SLANDER ACTION

Architect Called Surveyor (Who Designs Houses) a "Quack"

Sheriff Aikman Smith this week adjourned a slander action at Aberdeen Sheriff Court in which James Munro, 47-year-old architect, of Berryleys, Deveron Road, Turriff, Aberdeenshire, is being sued for £500 damages by Douglas Elliot Scott Turnbull, aged 54, borough surveyor and sanitary inspector of Turriff.

Mr. Turnbull, it was stated, is not a registered architect but carries out architectural work for Turriff Town Council and with the consent of the council also does private work. The action is based on statements in regard to Turnbull which Munro is alleged to have made on March 16, 1957, to Dr. David Stewart Hogg, of Dundrennan, Turriff, for whom Mr. Turnbull had been planning a house.

Mr. Turnbull claims that the statements were false and calumnious. Mr. Munro denies slander and claims that any statements made by him consisted of fair comment on the actings of the Borough Surveyor as a public official.

Dr. Hogg, in evidence, said he called at Munro's house at his request.

"He took me into his private room and said he had heard I proposed to build a house and was employing Turnbull to prepare the plans. I told him Turnbull had already prepared plans and that they had been passed by the Planning Committee."

Dr. Hogg said Munro said he was surprised that he, as a professional man, was employing Turnbull as he was just a quack and his work was not good. Munro also said he objected to Turnbull being employed to do private work when he (Munro) was a fully qualified architect in practice in the town.

Munro was very angry and aggressive and used the word "quack" at least three times. Dr. Hogg said he understood this expression to mean a man who falsely claimed to have abilities of which he was incapable. He had no doubt the word was used in a derogatory sense.

Adam Simpson, Town Clerk of Turriff, said that Turnbull was employed as borough surveyor and sanitary inspector for which he received a salary. He also did architectural work for the Town Council and received commission on the value of the building work done. He had done this since 1934 and had been responsible for the design and supervision of about 250 houses.

The Town Council had decided, at a private session, that they had no objection to his doing private work provided it did not interfere with his public duties.

The council confirmed this decision when approached by the Aberdeen Society of Architects in 1956. Mr. Simpson said it was a monetary advantage to the Town Council to employ Turnbull rather than a qualified architect.

Mr. Turnbull, in the witness box, said he had completed his articled apprenticeship in an architect's office, but did not go to a university to complete his qualifications because of his father's death.

Dr. Hogg told him of Mr. Munro's allegations in March, 1957. He took the "quack" allegation to mean that he was pretending to be able to do something he was incapable of doing. Mr. Turnbull denied that he had neglected council work for private work or that he had used council staff for his own purposes.

Mr. Munro, in evidence, admitted that he told Dr. Hogg that Turnbull was not a qualified architect and was a "quack." He had used the expression because he was talking to a doctor and Dr. Hogg had taken it in that sense. He had not used it in a derogatory sense. He had not criticized Turnbull's public or private work apart from a local housing scheme. He denied saying that he objected to Turnbull using public materials, instruments, staff and paper for private work.

W. Balfour Robb, advocate for Munro, asked: "Were you in fact criticizing the system in Turriff rather than Turnbull?"—"I cannot think it is fair to me as a ratepayer."

Mr. Munro said he had never intended to impute dishonesty on Turnbull's part. They had always been quite friendly and he had no animosity towards Turnbull. He thought Dr. Hogg's account of their conversation was exaggerated. His whole action had been based on the fact that he was a ratepayer in Turriff and an architect carrying on a private practice and he wanted to draw attention to what he believed was an iniquity.

Cross-examined by Gordon Henderson, advocate for Turnbull, Mr. Munro said he felt there was an iniquity in the fact that he had overhead expenses to carry in his business and had to subscribe to the salary of an official who was competing in business with him. The meaning he attached to the word "quack" was a person who had not the specific qualifications to be admitted a member of a profession, although he might have the skill to do good work in that profession.

When Mr. Henderson suggested that the generally accepted meaning of "quack" included an element of fraud and of the charlatan Mr. Munro said that was not the meaning he had in mind.

Mr. Munro denied that he had set out to blacken Turnbull's reputation in the eyes of his client. He agreed that it might be to his personal advantage in business if the Town Council barred Turnbull from doing private work, and added that it would be to the advantage of the community as a whole because the borough surveyor would have more time to do the work for which he was paid a salary.

On the completion of the evidence the Sheriff adjourned the case for the hearing of the agents' submissions on a date to be fixed.

CREDIT SQUEEZE

Time for Reappraisal

The "credit squeeze" is having its effect, but the Government, whose task at the present time no one would envy, must not carry it too far or they will do great harm to our important basic industry, said Stanley Farrow, President of the London Master Builders' Association, at a meeting last week.

The effect of the credit squeeze is now being felt by all of us in the building industry, said Mr. Farrow, and must be making us all think very carefully and seriously about our own particular organizations. That, in fact, is what the credit squeeze was intended to do, and although there is no doubt it is a most uncomfortable process it may well be good for the country, and if we face up to its challenge it may also in the long run be good for us.

No doubt many of you have been studying the Cohen Committee's report. This is not a Government report, but a report of three distinguished independent observers to us, the people, and one cannot but notice throughout the stress placed on the importance of increased productivity. The building and civil engineering industries are today carrying out some £2,000 million worth of work a year and if by increased productivity we can save a mere 1 per cent. that means £20 million; equally, 5 per cent. would mean a saving of £100 million a year.

So in this period when we have time, perhaps too much time, for a re-assessment of our present situation, I suggest that we try to interpret greater productivity in terms of our own organizations. I think that we may be able to do this most effectively if we look at the following aspects of the subject:

1. Greater understanding of the manager's role—and by "managers" I mean you and me down to the general foreman level—by the use of short-term courses such as those run by the LMBA at Sundridge Park and the Building Advisory Service.
2. Improved accounting and costing systems to give us the really important information on our capital—where the money is being spent, and why.
3. A critical and, if possible, objective approach as to what we, as managers, are doing. Are we really efficient, or do we only think we are?
4. The long-term training and education of our technical and managerial staff.

ABT

President Criticizes Plan For NALGO Link-Up

In his presidential address at the annual general meeting of the Association of Building Technicians last weekend, E. E. Hollamby referred to the terms in which W. C. Anderson, secretary of the National Association of Local Government Officers, had welcomed the proposed formation of a society of local government architects. Mr. Anderson, he said, welcomed the proposed society "on the terms which all the other sectional and professional societies of local government officers have accepted as fair and reasonable." Mr. Anderson had added that architects, like other local government officers, should "give their allegiance to NALGO."

To this Mr. Hollamby replied by quoting the General Secretary of ABT, who has said that the proposed Local Government Architects' Society would be offered the 58th place, with 57 other specialized groups, on the existing Joint Consultative Committee—a very different proposition from the small Professional Panel being canvassed among local government architects.

Basically, said Mr. Hollamby, the single issue at the turbulent AGM of the RIBA two or three years ago was how to achieve the enhanced status and financial reward to which architects in salaried employment were entitled. To this was added a single fact, that the organization most in a position to fight for these aims was NALGO, whose disillusioned members were then pressing the RIBA to do something on their behalf.

The Ad Hoc committee—which Mr. Hollamby compared to the time-consuming

device of a Royal Commission—had, after labouring away for a year or two, proposed in effect that, after all, NALGO, with the adjustment of yet another consultative committee, was the most fitting organization to fight for the status and salaries of local government architects. He did not wish to belittle the efforts of the committee, or question their sincerity, but the cruel facts were that the committee's proposal would, *in its present form*, still further fragment the profession, divide its loyalties and make it still more difficult to raise the status and salaries of architects as a whole. What had the *ad hoc* committee done about ABT's proposal to set up a Whitley Council of private employers and salaried employees in private practice? The ABT was willing to consider its own reorganization if it would help the RIBA in considering these proposals.

What of the salaried architects not covered by local government—the nationalized industries, the chain stores, commercial firms, the co-operative societies, the Scottish Special Housing Association, or the big building contractors with their growing "All-In Service." And what of the ABT? All trade union experience showed the harm of settting up a rival organization to those already in the field. The solution, he suggested, lay in such unspectacular ways as amalgamation, federation and joint committees.

RIBA

The Privileged Few

The Council of the RIBA has announced the names of some of the participants in the private conference on architectural education, organized by the Board of Architectural Education and to be held at Oxford from April 11 to 13. The subjects for discussion will include:

Architectural education: the needs of the community, and recruitment to the profession.

Training up to the level of registration.

Advanced training and the development of research in architecture.

The conference is planned as a series of free discussions to which it is hoped all the participants will contribute. It is not open to the Press, but a verbatim report will be taken for the consideration of the Council of the RIBA and the Board of Architectural Education. After consideration it is hoped to issue an account of the discussions for publication.

The RIBA states that amongst those who have accepted the invitation to attend are:

Professor Sir Leslie Martin, Chairman. Nils Ahrbom (Professor of Architecture, The Royal Technical High School, Stockholm), C. R. Allison (Headmaster, Brentwood School, Essex), Ove Arup, A. Hudson Davies (Director, Pilkington Brothers, Ltd), R. A. Dingwall Smith (Scottish Education Department), Harvey G. Frost (Vice-President, Institute of Builders), Marie Jahoda (Professor of Psychology, New York University), W. James, F.R.I.C.S., Preben Hansen (Professor of Architecture), Academy of Art, Copenhagen), B. L. Hallward (Vice-Chancellor, University of Nottingham), F. M. Lea (Director of Building Research, D.S.I.R.), R. S. McDougall (General Manager of Stevenage Development Corporation), E. W. Maynard Potts (Headmaster, Hendon County School), A. A. Part (Under-Secretary, Ministry of Education), Rudolph Palumbo (Director of investment companies associated solely with the building industry), R. F. Saunders (Deputy Education Officer for Worcestershire), Walter Taylor (Director, Department of Education and Research, American Institute of Architects), Sir Walter Worboys, Director, I.C.I. Ltd.

William Allen, G. Grenfell Baines, D. H. Beaty-Pownall (Vice-Chairman, Board of Architectural Education), Hubert Bennett, Lionel Brett, Sir Hugh Casson, Harold Conolly, Anthony Cox, R. E. Enthoven (Chairman, Board of Architectural Education), Raymond Erith, P. G. Freeman, T. B. F. Gargett (Hon. Secretary, Royal Australian Institute of Architects), C. C. Handisyde, P. E. A. Johnson-Marshall, R. Llewelyn Davies, D. H. McMorran, E. D. Mills (Hon. Secretary, Board of Architectural Education), Anthony Pott, Robert J. Potter, Richard Sheppard, T. H. Thoms (President, Royal Incorporation of Architects in Scotland), J. H. W. Voelcker, C. S. White.

F. Chippindale (Head of the Leeds School of Architecture and Town Planning), Prof. R. Gardner-Medwin (Liverpool University School of Architecture), F. E. Green (Head of the Brighton College of Art School of Architecture), T. E. Hall (Principal, City of Liverpool College of Building), Denis R. Harper (Professor of Building, College of Science and Technology, University of Manchester), Thomas Howarth (Toronto University School of Architecture), A. Douglas Jones (Head of the Birmingham College of Art and Crafts, School of Architecture), Prof. R. H. Matthew (University of Edinburgh Department of Architecture), Prof. John Needham (University of Sheffield, Department of Architecture), D. W. Notley (Vice-Chairman, Board of Architectural Education, Head of the Nottingham College of Art School of Architecture), Michael Pattrick (Vice-Chairman, Board of Architectural Education, Principal of the Architectural Association School of Architecture), E. M. Rice (Principal, Hammersmith College of Art and Building), T. E. Scott (Head of the Northern Polytechnic, Department of Architecture, London), L. W. Thornton White (University of Cape Town School of Architecture), J. S. Walkden (Head of the Polytechnic School of Architecture, Regent Street, London).

In Brief

Harold Macmillan, the Prime Minister, has accepted the Council's nomination for election as an honorary Fellow.

The British Architects' Conference is to be held at Coventry in 1962, and at Sheffield in 1963.

The Civic Trust has made a grant of £1,000 for the production of two extra copies of the RIBA Subtopia Travelling Exhibition, which, it is hoped, will be available by the autumn.

The RIBA is to support the Town Planning Institute's application for a Royal Charter.

Leslie Stephen Fairweather obtained the highest number of marks in the Final RIBA Examination held in 1957, and has therefore been awarded the Ashpitel Prize. He was trained at the Department of Architecture, Brighton College of Art and Crafts.

John Ward obtained the highest number of marks in the Intermediate RIBA Examinations held in 1957 and has, therefore, been awarded the Sir Banister Fletcher Prize. He is receiving his architectural training at the Department of Architecture, Coventry College of Art.

The next quarterly meeting of the recently formed Architects' Christian Union will be at the RIBA on Wednesday, April 16, at 7 p.m., preceded by refreshments at 6.30 p.m. The speaker will be Montague Goodman, F.R.G.S. Further information regarding the Union may be obtained from the Hon. Secretary, L. G. Hemmings, 8, Briary Gardens, Bromley, Kent.

WORKING FOR A SPEC. BUILDER

Eric Lyons' Solution To a Baffling Problem

In a talk at the RIBA this week Eric Lyons discussed his experiences in working with a spec. builder, and the problem of raising the standard of design in spec. built housing. He argued that the abolition of aesthetic town planning control over the work of architects would strengthen the hands of town planning authorities to reject badly designed proposals by builders and other laymen, enhance the status of architects, and enable them to participate in planning on equal terms with town planners.

We are all embarassed by the vast, squalid achievements of the speculative builder. Although architects are united at least in their resentment of the despoliation of town and country, it seems very few architects are prepared to interest themselves seriously in the developer's problems—perhaps I am really here as an Awful Example. Anyhow, in order to justify my participation in this nefarious trade I am going to speak in favour of this method of providing domestic buildings; and I am going to present a completely biased view of the situation.

I think we are approaching the time when it may no longer be economically possible for the individual to have built his "special" house, and, from a town planning point of view, I doubt whether there is any solution to the collection of individually designed small houses—no matter how well designed. The vast majority of housing is promoted by local authorities and new town corporations or by speculative development. The post-war return of the spec. terror should not obscure the fact that generally speaking the standard of housing design is low throughout the country. I say this despite my admiration for the important work being done by the LCC.

Although my experience is limited to working for only one very special group of developers, I am comforted by a firm theory about the whole problem; it is that the spec. builder could provide the most effective opportunities for architects to regain their prestige in domestic design. There are a few spec. builders who have made serious attempts to improve their standards, and recently there have been several interesting experiments by some small firms. On the whole, the situation has not changed much over the past 30 years—town-planning or no town-planning. My theory is that it will not change unless architects create the conditions whereby they can be involved.

Most of us are baffled by the problem, and there appear to be three broad solutions.

The *first* is to prohibit spec. building and restrict housing to local authorities; this might be regarded as the politician's solution. The *second* solution is town planning aesthetic control, which of course is the town planner's answer. The *third* solution, which is not used so often as one might think, is the extensive and *full use* of architects. I hope this may become the architect's answer.

One might sympathise with the idea of entirely banning spec. building if one had not seen that most local authorities have played safe, and that Housing Manuals, although responsible for improving many standards, have tended to stultify any creative approach to basic design. Indeed, the very existence of official manuals as guides to good taste for local authorities has made architects almost unnecessary, and we have only to look at the suburban wastes which constitute most of our New Towns and at the blight of tidy emasculated gable-ended houses around most towns and villages, to see the scale of the opportunities that have been lost.

I know that many architects have struggled in this strait-jacket of standard plans, room sizes, directives, committees, and so on, and have made valuable contributions but this is often achieved in spite of the "regulations." It appears that few architects can sustain the delicate balance that is necessary for effectiveness in local authority employment. As a means of architectural development it is at least *unreliable*, and although there has been tremendous progress in some areas, most of our official housing remains obstinately outside the stream of modern architectural thought. I am working for local authorities and I am certainly not opposed to local authority housing, but I think that the existence of architects working in the freer fields of private enterprise should encourage a healthy interchange of ideas and stimulate the architectural and social experiments which are so necessary.

Aesthetic control has not worked

The second solution of aesthetic control has been in operation for a long time and it clearly doesn't work. I have heard it suggested that the control should be tightened but I think that the tighter the control the more likely it is to choke architecture. The "guidance" of even well-intentioned town planning officers can do little, particularly as their judgment is often trimmed by the prejudices of lay committees. Aesthetic control has made but the slightest difference to the worst work, and I regard it as a serious impediment to architectural progress, and an encouragement of the decadent cult of preservationism. I have had town planning difficulties ranging from straight obstruction to any kind of modern design, on the one hand, to the fumbling of the town planning officer who is determined to make his mark. The effects are always unpredictable, often farcical, rarely beneficial, wasteful of time, and wearing to the nerves. I have found in Cambridge one of the notable exceptions to this inglorious rule.

Badly designed spec. building still flourishes in spite of the Act; I begin to believe because of the Act, owing to the discouragement of any departure from the so-called traditional, also known as amenity, detrimental to which we must not be, and up with which They are not prepared to put. No matter how low the town planners and their committees may regard the architect as a form of life, even they might agree that the average architect can design a better house than the average spec. builder. If the application of the town planning Act could eliminate aesthetic censorship of architects' work, we would quickly see improvements in housing design. The architect would have a recognized advantage over the spec. builder's son-in-law who is good at drawing, and the town planning authorities would be in a stronger position to reject the unworthy lay application, knowing that the builder had a reasonable remedy in his own hands—by going to an architect. This does not guarantee that all buildings would be beautiful—but they must be better, and it would create opportunities for young architects. One important advantage to the profession would be an enhanced status in society, with a recognized *responsibility*. We would be out of the grace and favour department, and might be allowed to meet town-planners on equal terms, and *collaborate* and *participate* in the formation of our ever-changing physical environment. I am reckless enough to suggest that this is the architect's proper job.

Reduced fees—a disservice to architecture

The third solution then to the Spec. Terror, and the most obvious one, is the involvement of architects. Can we be surprised that architects are not used, and can we blame the spec. builder entirely? Even the RIBA appears only recently to have recognized the need for a special study of the problem. Too many architects have been prepared to merely tidy-up the front elevations and get the drawings through the local council. I am sorry to see that our Institute has sanctified this idea by recognizing "partial service" and setting out a special scale of fees—*reduced* fees, of course. Surely this is a great disservice to architecture? In no other field of building is it held that architects should be employed to prepare only basic drawings, charging a nominal fee, on the theory that any further service cannot be worth anything.

We all know that no building can achieve any predictable form without the follow-up of complete detailing and supervision, and with full control of the building programme. This is the only way we can gain experience; to send out a design with an account for fees must be a loss all round. I believe in high fees and high salaries for archtects—not lower ones—and I think this demand can be justified even in spec. building. I have responsibility for design, layout, contract supervision and landscape design, and I expect to be consulted on suitability of sites and policy of development. In other words, *full service*, and this cannot be done on the kind of fees architects are prepared to accept from spec. builders. Cut fees, official or otherwise, must only undermine the architect's influence.

I must apologize if I have abused my position here by lengthy remarks, and I propose now to deal with some practical aspects of my own work. My own starting point was the idea that there were lots of people who wanted to live in modern buildings—even if they didn't know it. I also thought that one ought to apply a serious architectural approach to this problem, as to any other kind of building, although I have discovered that there are some commercial issues which are peculiar to speculative development. I have tried to operate as might an industrial designer working for a manufacturer, by interesting myself in the "market for the goods," and by trying to rationalize the manufacturing process.

The design basis has been to use simple buildings involving the highly repetitive use of structural elements and equipment and—this is an architectural heresy—involving repetition of similar buildings on *different* sites. Alongside this repetition I have established the need for constant experiment, not only in architectural detail, but of unit planning, and of site planning. This means that the developer gets some "sales continuity" and at the same time "new models" are also being tried out. I do not think that I have a lot to show for all this, but at least the developers are now confident that there is a *market* for modern architecture, and that there are plenty of people who are dissatisfied with the vulgar pretensions of the suburban house racket.

I have always sought some kind of structural standardization and as the buildings have been only two and three storeys high, I have been able to exploit the brick cross-wall technique with a standard bay width throughout. The general principle has been to "cover-strip" inside and out so that crude construction is faced-up at a late stage, and so to make small demands on continuous craftsmanship. All fitments including windows are specially made to suit the "module" and this has been found to be as cheap as so-called standard fitments.

In site layouts I have largely avoided the street by creating courtyards, and varying patterns of "external enclosures." I believe that it is here that I am beginning to learn the most—about the critical factors that establish effective relationships in a series of similar buildings. Somewhere here lies the secret of "urbanity," and urban building is the only kind that really interests me. I believe that low-density development is strangling every town in the country and contaminating the country around every town. And it would not help if all the buildings were perfect.

My work has been made easy by ideal clients who have provided me with ideal conditions. Not only do they do as I tell them—they tell me to do it better next time. One of their contributions has been the perfection of a special technique of leasehold purchase, which is effecting a quiet revolution in property ownership. It has solved the old problem of maintenance of common spaces and structures, and also involves each resident in the autonomous Residents' Society which runs each estate. It means that I am perhaps too often made aware of my own shortcomings by these societies, but the developers themselves gain real experience. This experience inevitably means more demands on their architect, and I can only hope that I can continue to meet these demands—or look as though I am doing so.

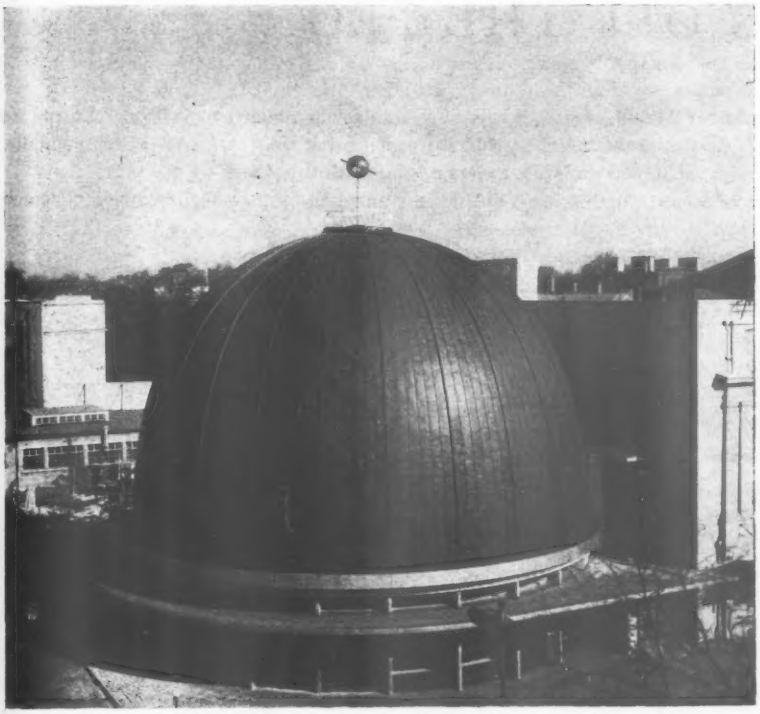
Building societies: a major obstacle

There is a major obstacle in the path of the architect working for a developer. The building societies, with few exceptions, and despite claims to the contrary, maintain an atavistic attitude towards housing and seem to be happiest with the so-called tradition of half-timbered Georgian—what Osbert Lancaster calls Pseudish. In times of financial stress—which we may regard as normal now—they only show interest in suburban horrids and seem to believe that modern architecture is just a passing phase and a risky investment, because people may not want to live in them in ten years' time. Perhaps this situation is changing because I do know of two of the largest societies who see the inevitability of change, and are being helpful, but generally speaking the societies remain unmoved by our convictions.

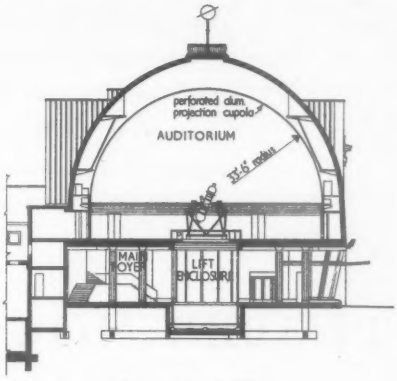
It must be seen that architects are not regarded as the experts in housing. The trouble is that people *live* in houses; they are naturally more prejudiced about this type of building than any other. We have to overcome this atavistic drag if we are to change the pattern of human habitation. I think that it is clearly our responsibility to see the need for change, not for mere architectural novelty, but because of the fast changing social pattern. There is no "market research" on this problem, so we must experiment, and I think that the spec. builder could provide the architect with the right kind of opportunities for this work. It seems to me that this is a worth while idea which can be realized, if we offer the developer a thorough technical service and guidance and are prepared to *sell architects to the community*.

THE LONDON PLANETARIUM AT MADAME TUSSAUDS

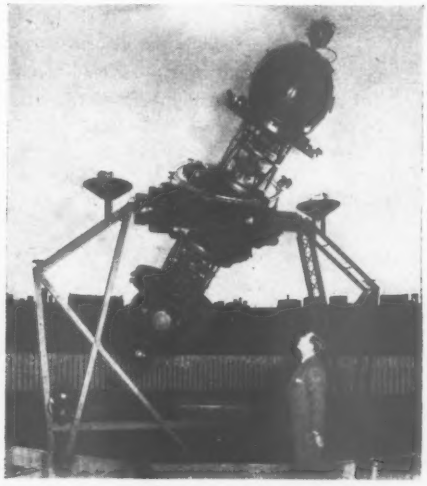
The London Planetarium, designed by George Watt, occupies the site of the Madame Tussaud's cinema which was destroyed by enemy action. The Zeiss planetarium projector (shown centre right, installed, with a mock silhouette of London's skyline beyond) requires an interior dome of 67 ft. diameter and as this takes up practically the whole site the theatre is raised to first floor level and the entrance foyer planned beneath it. The requirements of the building set some difficult acoustic and ventilation problems, and the vibration caused by underground trains on the adjacent Metropolitan Line had also to be dealt with. The main structure is of reinforced concrete; the outer

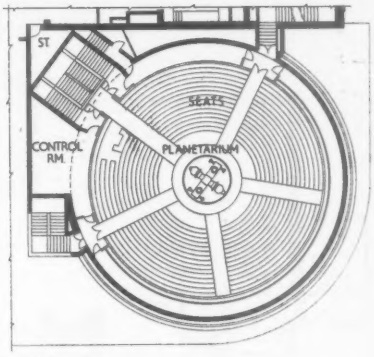


structural dome consists of in-situ ribs with inner and outer precast panels separated by 3-in. thick glass-fibre mat. A further 2 in. of acoustic absorbent is attached to the inner face. Externally, the dome is covered with 1-in. cork slabs and sheathed in copper on bituminous felt. Between the exterior and inner domes (the latter being of white-painted perforated aluminium sheet on a ribbed framework) is an extensive ventilation trunking system which feeds and extracts filtered air to the theatre through the perforations in the inner dome. The air within the theatre is maintained at a pressure of 2 lb. per sq. in. higher than that of the external air, and the air change rate is 8 per hour. By these means dust particles are eliminated, an essential condition since otherwise beams of light from the projector would be visible. The problem of vibration from underground trains has been solved by sheer mass. Forty-eight piles have been driven to a depth of over fifty feet; these are linked by a spider's web of beams at basement level, above which 12 columns support the superstructure of 2000 tons dead-weight. The projector, which is quite the most spectacular feature of the Planetarium, is mounted on a lift platform and when not in use is lowered into a cylindrical glazed showcase in the centre of the foyer. R. Travers Morgan and Partners were the consulting engineers, Frank N. Faulkner and Partners the quantity surveyors, and A. J. Wait Ltd. were the general contractors.

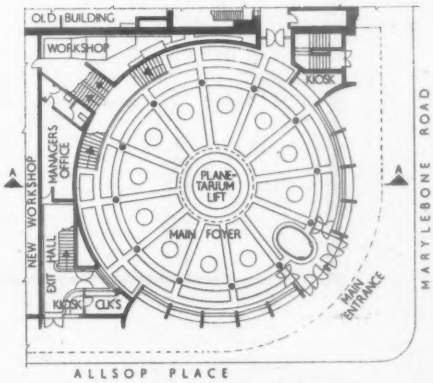


Section A-A [Scale: $\frac{1}{16}$" = 1' 0"]





First floor plan



Ground floor plan [Scale: $\frac{1}{16}$" = 1' 0"]

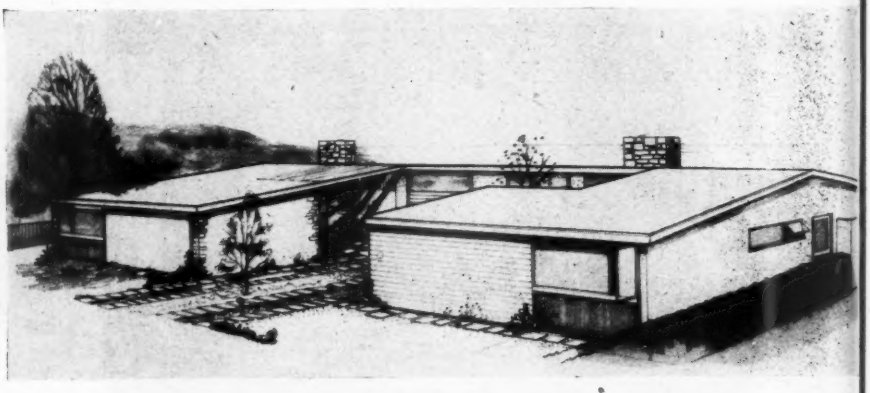
Dissatisfaction has long been voiced in the profession on the very small proportion of houses in this country which are designed by architects. Suggestions for changing this state of affairs have ranged from making the employment of an architect legally compulsory, to the formation by the RIBA of a small house design bureau. This last proposal the RIBA took seriously and began to investigate many months ago. It has now been outpaced by the British Columbia Lumber Manufacturers' Association, which has produced a free booklet of ten off-the-peg house designs following their recently organized competition. The way in which this has been done and the resulting designs themselves will probably raise a number of controversial questions and we invite our readers to comment.

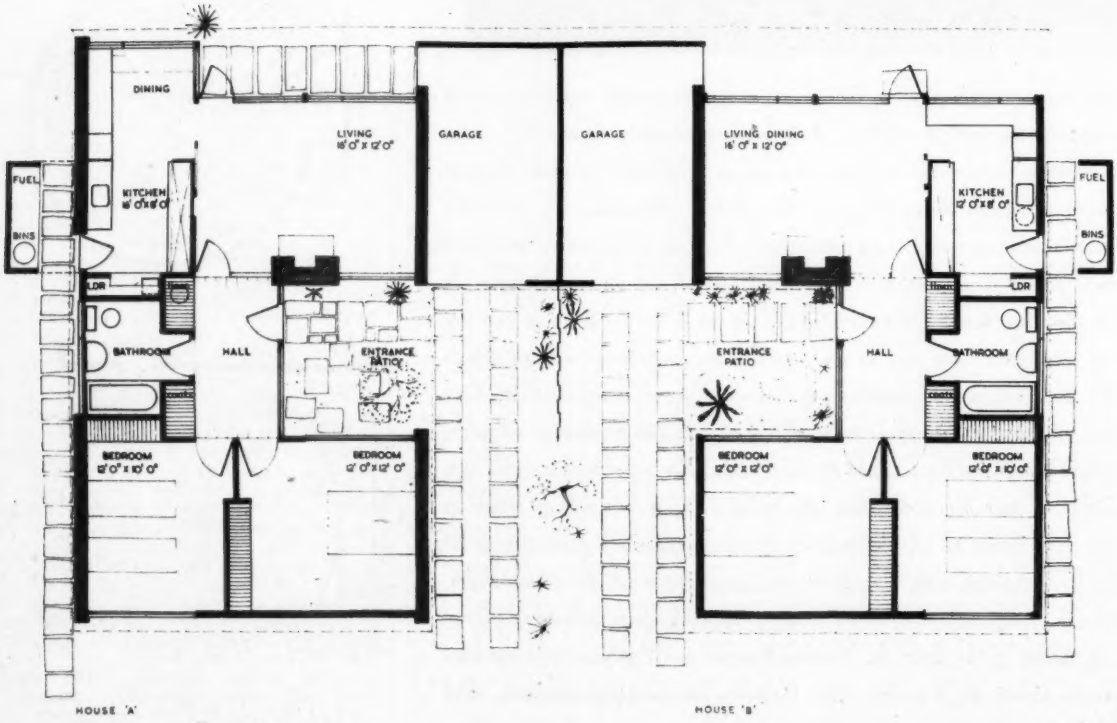
TIMBER HOUSES OFF THE PEG

In 1957 the British Columbia Lumber Manufacturers' Association elected a panel of 10 British architects and commissioned each to design a timber house. The members of the panel were selected from 300 invited applicants, the final panel being chosen not necessarily on merit, but to give a representative coverage of the British Isles.

The designs prepared by the panel members have now

Design 102 by Edward Butcher of Farmer and Dark. Two bungalows sharing a site. Floor area, House A, 776 sq. ft., House B, 744 sq. ft. (both excluding garage). Approximate cost, House A, £2,280, House B, £2,040.





been issued in a free booklet by the BCLMA and the designs are to form the central feature of an exhibition on Canadian Timber at the Building Centre from March 26 to April 3.

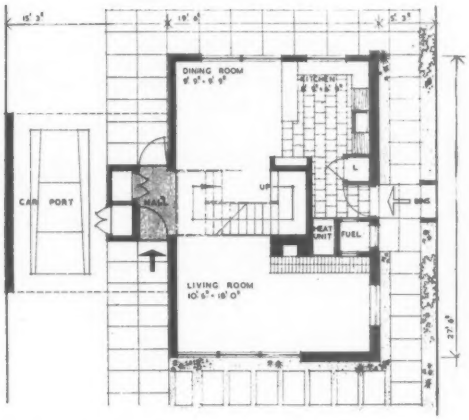
Working drawings and specifications have been prepared for each design and it is the intention that these may be purchased by prospective house-owners or builders on payment of a royalty to the architect concerned.

It is perhaps unfortunate that houses in the £4,000 to £5,000 range should have been included in this "off the shelf" architecture. There can be little or no objection to such a scheme in the small house range, say up to £3,000, since it is generally recognized that such small houses barely cover the architect's production costs and the majority are anyway designed by local builders, whose lack of training and skill in design is all too discernible in the resulting building. Britain might with advantage emulate, the states of New South Wales and Victoria where the Royal Australian Institute of Architects operates a Small House Bureau, to which qualified architects may submit plans and specifications of small houses. Each design may be used only a limited number of times, the sum total of the royalties on this number providing a fair and reasonable profit to the architect. The Bureau is said to be well supported and enables many more people to enjoy the obvious advantages of a professionally designed home at a cost which they can afford, and at the same time converts the small house into a source of profit to the architect.

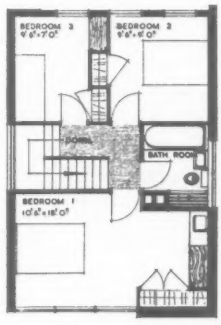
In contrast, the BCLMA makes no mention of the number of times each design may be used and any sources of profit to architects would seem to accrue only to the 10 panel members strategically stationed to give geographical coverage of the British Isles and backed by the impressive might of the BCLMA, Canada House, and the regional offices of the Timber Development Association.

In fairness to the organizers, the booklet does state "as a rule, a client's individual requirements are best served by commissioning an architect to design the house and supervise the work to completion and this is a course that is recommended." It is, however, a more expensive course and greater expenditure seldom has greater appeal. A further problem in "off the shelf" architecture is that clients or builders may make alterations to design and although the specifications may include, as they do here, a clause requiring that where any major departure is contemplated the architect's prior consent must be obtained, it is difficult to enforce such a provision.

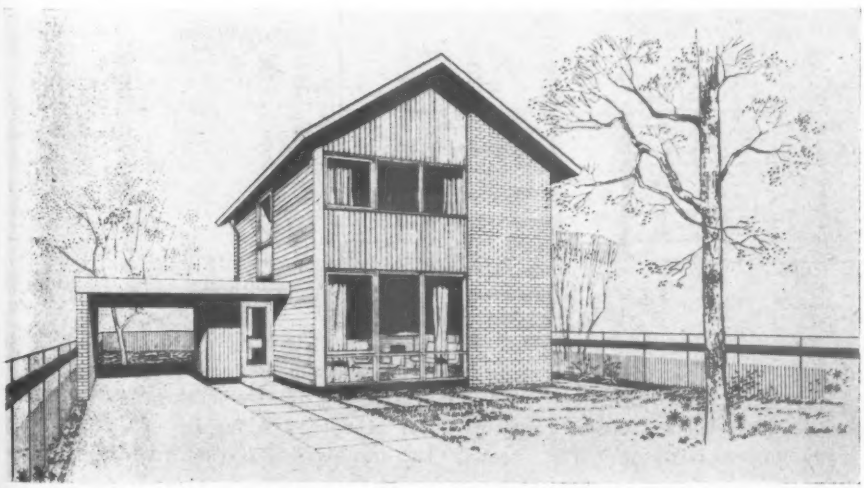
If then there is to be "off the shelf" architecture, and certainly for small houses up to £3,000 there is much to support it, it would be better if it were to be officially controlled and legislated for, as is the Small



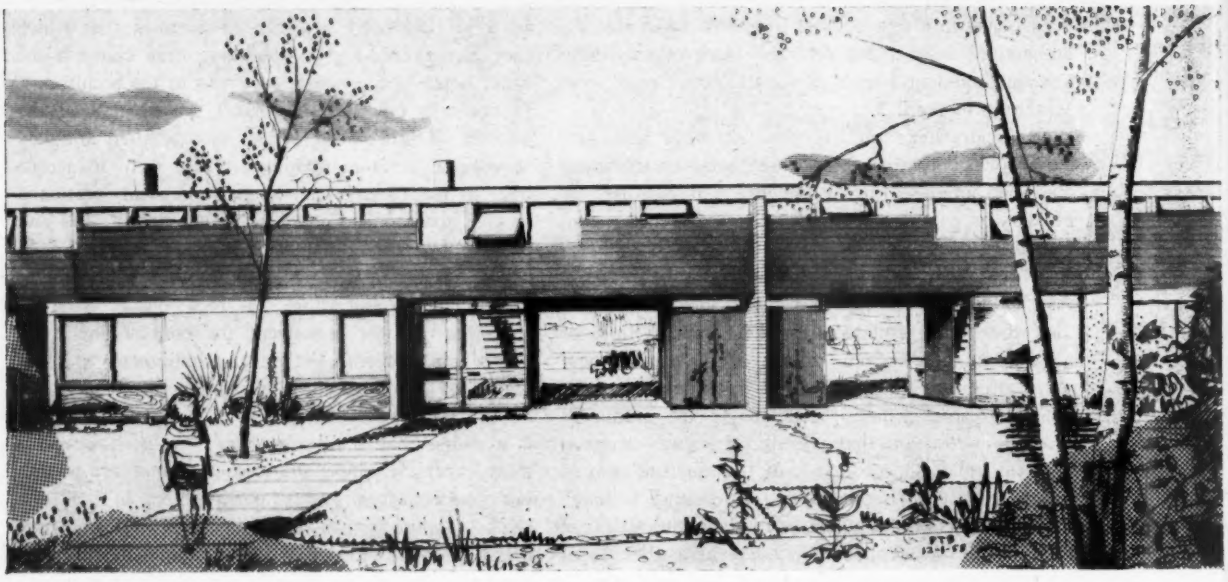
Ground floor plan



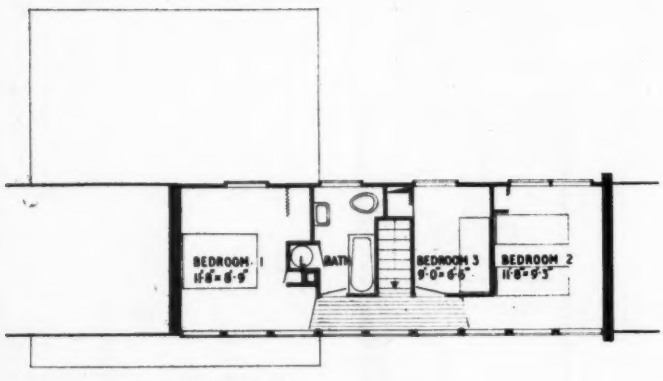
First floor plan



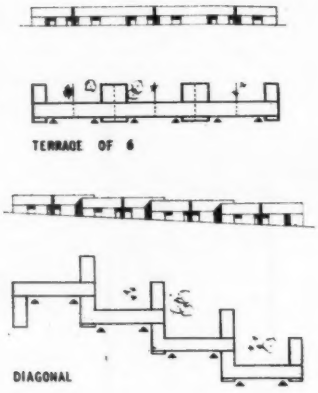
Design 103 by Munce & Kennedy, requires a minimum site width of 40 ft. Floor area, 1,222 sq. ft. (including car port). Approximate cost, £2,400-£2,650.

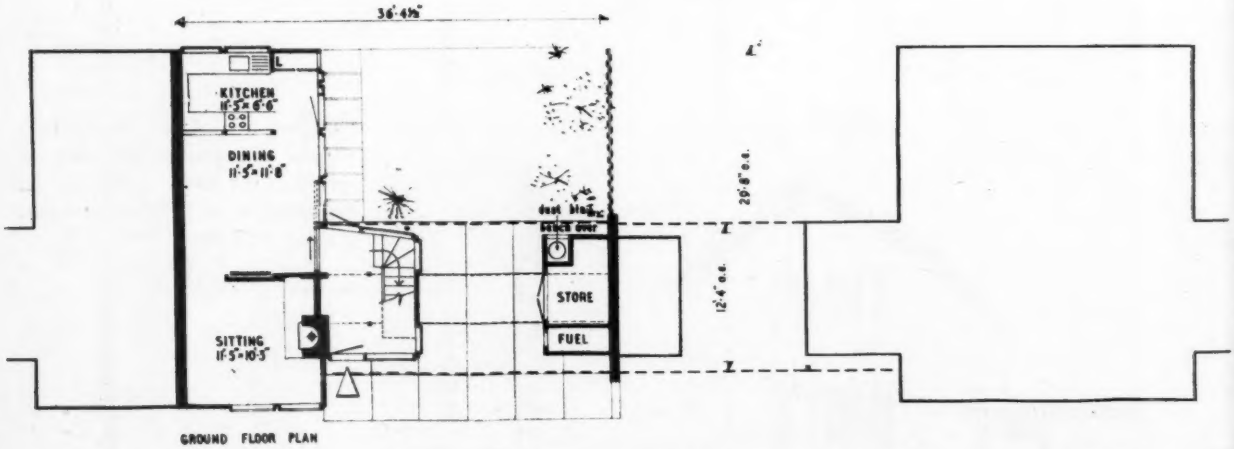


Design 101 by Leslie and Peter Barefoot, a terrace house designed for a farm community. Floor area, 871 sq. ft. (excluding passageway). Approximate cost, £1,750-£1,950.



FIRST FLOOR PLAN





GROUND FLOOR PLAN

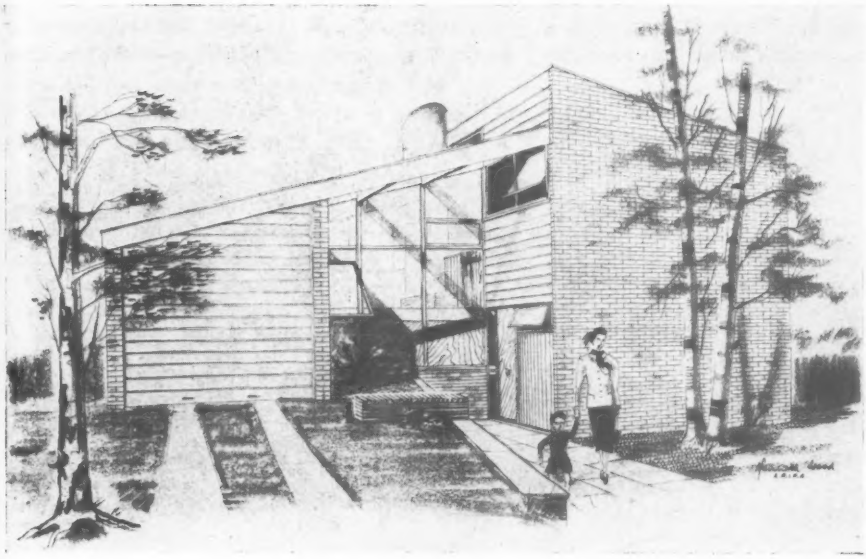
House Bureau in Australia.

The working drawings and specifications have been used to obtain cost estimates from builders and each cost quoted was apparently obtained in this way. The costs quoted for these houses are reasonable, particularly considering that all except Design No. 101 have whole house heating by warm air, or electric floor heating. The drawings are also intended to show the

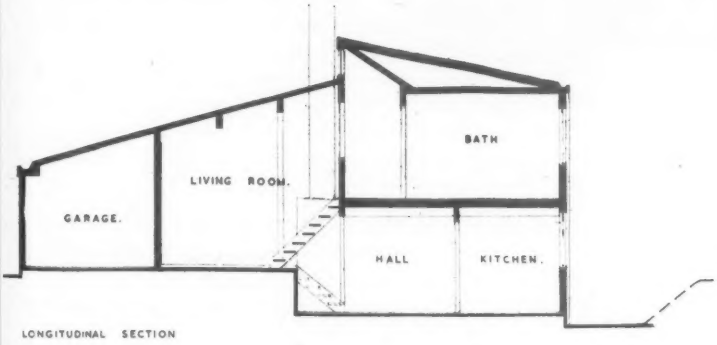
timber platform framed construction which is being urged by the BCLMA and the Timber Development Association.

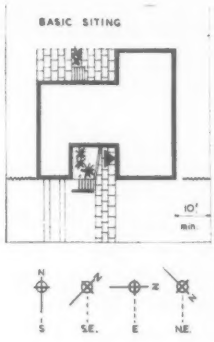
Although this form of construction is commonly employed in America and Canada, houses in Britain are seldom erected in this way. Labour costs are still not sufficiently disproportionate to materials costs for hand-erected block and brick to be uneconomic. Many constructional techniques which are employed in America prove to be more expensive when applied in this country for this reason.

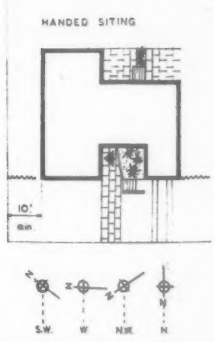
Certainly the timber platformed framed house has the

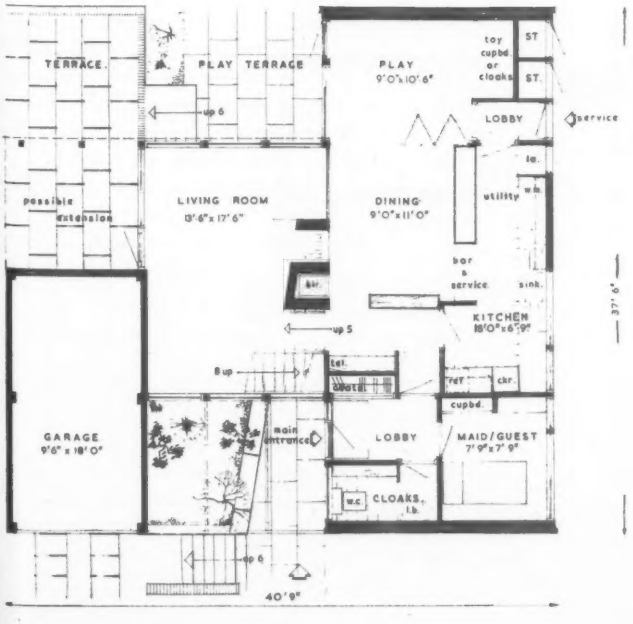


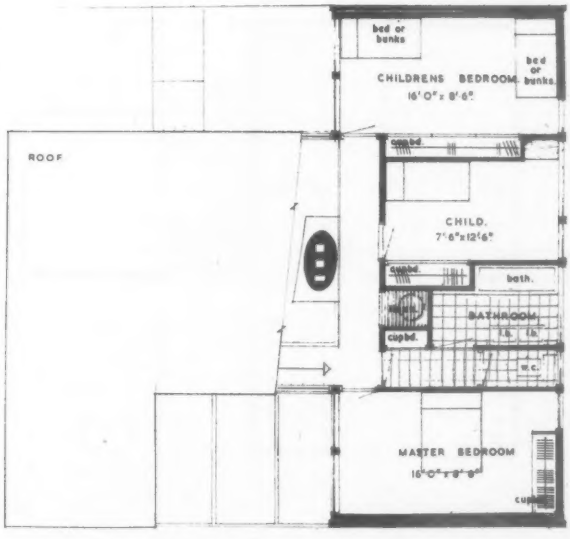
Design 109 *by Kenneth Wood, requires a minimum site width of* 60 *ft. Floor area,* 1,380 *sq. ft. (excluding garage). Approximate cost,* £4,450-£4,750.







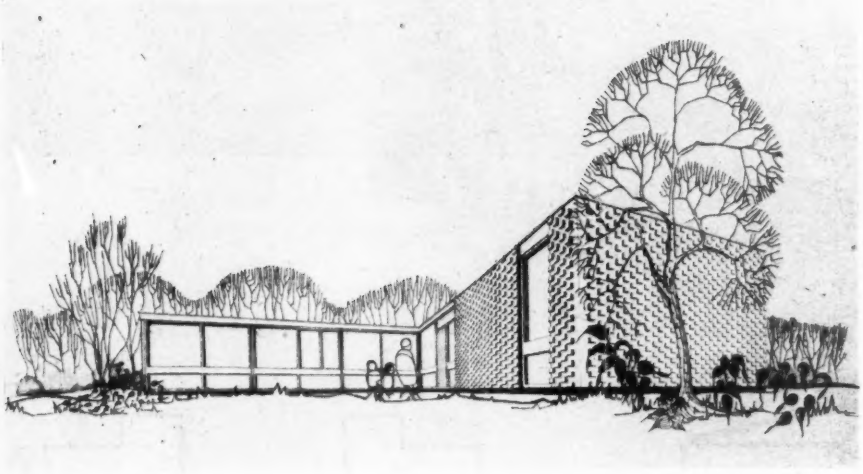




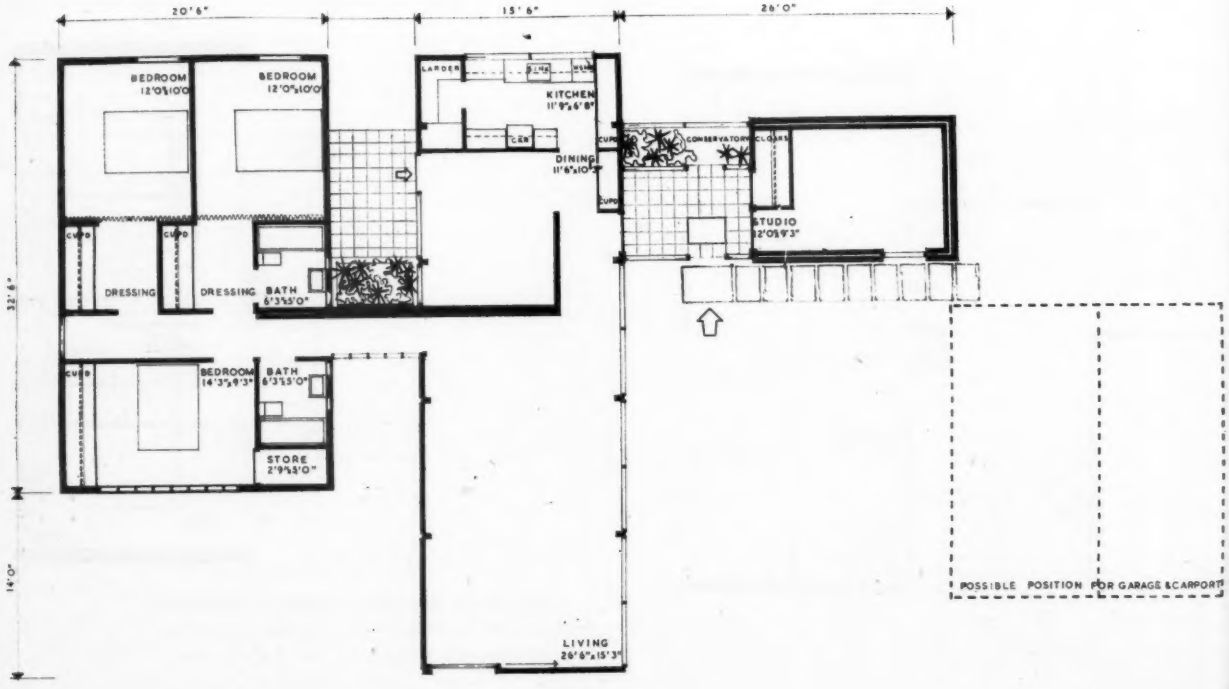
Left: ground floor plan. Above: first floor plan

advantage of high thermal insulation (increasingly important as central heating becomes more generally adopted), speed of erection, and dry-construction, so that the client endures no "drying-out" period. The common prejudice of fire hazard is unsupported by evidence and fire-insurance is in fact normally only 6d. per cent. higher than for conventional brick houses —and this only because fire damage if it occurs to a timber house is more complete, rather than more frequent. Protection from rot and insect attack can be afforded by pressure impregnation at no more than £20 to £40 a house.

All these houses use Canadian timber which is surfaced to Canadian Lumber Standards. (An article dealing with CLS timber used on the LCC timber houses at Farnham Royal appeared in the ARCHITECTS' JOURNAL for October 31, 1957.) Surfaced timber for structural members is undoubtedly a worthwhile intro-



Design 110 *by Nelson & Parker, designed for a large, open site, with wings allowing for changes of level to be accommodated. Floor area,* 1,612 *sq. ft. Approximate cost,* £4,850-£5,150.



duction into Britain, giving cleaner site handling, accuracy in setting out and facilitating the successful use of plasterboard internal linings without a skim coat, as well as the use of alternative dry decorative linings. If walls are to be papered it is advisable to skim coat the plasterboard, otherwise the wallpaper is difficult to remove when redecorating. CLS timber has the disadvantage that its scant size is smaller in cross-sectional area than rough sawn and in consequence larger sizes may sometimes have to be employed. The range of sizes available is also restricted compared with European rough sawn.

The Model By-laws present the most onerous problems in regard to timber housing, particularly on narrow plot sites for which most of the designs are proposed. Most designs (for instance, No. 102 shown on page 460) are forced to employ some masonry external wall facings to comply with the by-law requirement that timber-faced walls shall not be less that 10 ft. from any boundary. That this masonry is never load-bearing in these designs will no doubt shock many purists, particularly where the masonry has returned ends giving an appearance of thickness and robustness more compatible with a load-bearing element than a cladding material.

The relationship between timber cladding and masonry is generally unfortunate in that it occurs where the by-laws demand and not where the architect wishes. Some designs may be said to be almost entirely conditioned in external appearance by these by-laws, as for example, is Design No. 103 (see page 461) where the brick-faced external wall adjacent to the boundary is returned at the gable end, to terminate a most exact 10 ft. from the boundary.

In terrace houses the only restrictive by-laws are those relating to gable end walls and requiring that alternate party-walls should project beyond timber-faced external walls, as in Design No. 101 (see page 462). The party wall is also required to project above the roof but a waiver in respect of this can usually be obtained. Even so, this tends to give timber-clad terrace houses a " cut-up " look, destroying their most attractive feature, unity. The design of Leslie and Peter Barefoot is particularly successful in avoiding this and their design is certainly the most attractive of the ten. It is somewhat extravagant in frontage for a terrace house, but the generous through access it provides makes it more comparable to a semi-detached dwelling in this respect and definitely more acceptable architecturally.

It is curious that the largest houses, costing almost £5,000, which would probably have larger sites and site frontages and therefore the by-law relating to timber-clad external walls within 10 ft. of the boundaries would not apply, are still confused and are not timber houses in the true sense, as Designs 109 and 110 (see pages 463 and 464) show. This may have resulted from hesitancy on the part of the BCLMA, who may have wanted to retain a " traditional appeal " to attract clients, but it is regrettable that the opportunity has been missed. One is left with the feeling that an open competition might well have served the organizers better.

CRITICISM

by J. M. Richards

HOUSING AT CANTERBURY

city architect, J. L. BERBIERS

This is in itself a fairly modest housing development (a single four-storey block containing 24 maisonettes—see pages 467-472 of this issue), but it is the beginning of something bigger because it is on the edge of Canterbury's largest slum-clearance area where rehousing work is getting under way. The chief reason, however, why it deserves special attention is that it forms part of an experiment aimed at reducing housing costs carried out in conjunction with the Ministry of Housing & Local Government, and it therefore raises questions of principle concerning the relations between cost and design.

The Ministry invited several local authorities to build maisonettes on the same system, and Canterbury were the first to get theirs completed. The system is based on brick cross-wall construction, which has often, of course, been used for two-storey houses but seldom, I think, for four-storey maisonettes.

It has certainly proved very cheap, as the cost-analysis published on pages 469-472 shows. The question I have to discuss is whether such an intensive effort to drive down costs produces an acceptable design. Because although cost is a matter all architects, quite rightly, are continually concerned with, cheapness as such is not necessarily an attribute of good architecture. A regard for cheapness may impose the kind of discipline that encourages good architecture, but that is a different thing. Architects are sometimes deluded by the credit that is to be earned by doing a job more cheaply than the next man, into thinking of it as something intrinsically desirable; whereas the point may come at which it is their duty to resist attempts to cheapen building still further in the interest of good architecture.

An important distinction has to be made, I think, between cutting costs by doing things in the old way but more economically, and cutting costs by devising new ways of doing them. The danger of lowering standards, and producing a merely undesirably cheap-looking and cheaply finished job, is naturally greater

Maisonettes at Canterbury: rear view.

if the first method is followed. The second method, which means bringing into play, for example, factory-produced structural components, standard fittings of all kinds which permit dry assembly on the site and so on, is obviously the direction to look in seeking cheaper but good quality methods of building. The interesting thing about this Canterbury experiment is that it confines itself on the whole to the first method (I say " on the whole " because although load-bearing brickwork is traditional, cross-wall construction could be described as non-traditional), yet it has produced a design that is both respectable and remarkably cheap.

The external effect is, admittedly, a little skimpy in places, but the design is more satisfactory than most speculative housing where cheapness has been the first consideration, and indeed than much local authority housing that has not come out so cheaply, and the space allocation, planning, finishes and equipment are up to normal low-cost housing standards. I suspect, however, that this is just about as far as one can go in reducing costs while using relatively traditional methods, and although the experiment was well worth making—if the Ministry is going to pursue this idea of inviting a number of local authorities to co-operate in trying out the use of some new system, would it not be more useful in the long run to experiment with a non-traditional form of construction, especially one using a high proportion of prefabricated components? This kind of non-traditional construction, although potentially cheaper, does not prove so unless used on a very large scale, and here would be an opportunity, with the Ministry acting as co-ordinator of several authorities building simultaneously, or combining all their efforts into one operation, big enough to make prefabrication worth while—just as the Ministry of Education has done for schools.

Of course one must not criticize a limited experiment like this Canterbury one for not being quite a different and more forward-looking kind of experiment. Nevertheless, this scheme does show up some of the limitations of a semi-traditional type of structure. For example, the design suffers (see photograph on facing page) from the cross-walled central portion having too little relationship with the end blocks, which are of traditional brickwork serving to stiffen the whole structure, and this is clearly a result of the decision to follow a new constructional system not being taken to its logical conclusion. In his recent Hales Place housing estate north of Canterbury, the city architect has built another block of four-storey maisonettes, using normal brick construction throughout, which was a little more expensive than the block under review (presumably because of the larger quantity of brickwork involved) but so much more satisfactory both in appearance and from the planning point of view that one wonders, once again, whether this additional lowering of costs is achieved by the most fruitful methods.

Leaving the question of cost, in which the chief interest of the scheme lies, one can however say that the planning is economical on the basis of normal space standards and the gallery access, which seems to be unavoidable in really cheap housing, sensibly used. The gallery is reached by a central staircase penetrating the full depth of the building and spans across the lower portions of the cross-walls; that is, the lower maisonettes are deeper than the upper by the width of the gallery, the extra space being given on the ground floor to a larger living-room and an entrance hall large enough to take a separate w.c. and a larger second bedroom above. The upper maisonettes in the centre have also been given larger bedrooms by using the space over the staircase.

The materials are agreeable in colour: stock brick at either end and below ground-floor sill level, red engineering brick for the exposed ends of the cross-walls (though I think it might have been better if this change of colour could have been avoided), vertical timber boarding for the infill between the windows and dark blue rendering in the staircase recess. Details are neat and workmanlike—at least on the entrance front. The other side, illustrated above, is less satisfactory, having a most unseemly foreground of brick sheds and concrete fencing; also a row of balconies that clutter up the elevations without serving any apparent purpose. They provide glazing down to floor level in the living-rooms of the upper maisonettes, but this can hardly be necessary because the window area is already large. It would be interesting to know from the architect whether he thinks such balconies will be justified in use, or whether they are there simply because projecting balconies are customary features of housing elevations.

But the most interesting thing to know from him, of course, would be whether he regards this as a low-cost housing experiment that is likely to lead anywhere, or whether he agrees that the experiments of this kind most worth making (given the advantage of co-operation between several authorities and if possible planning ahead with a nominated contractor) are those that depart still further from traditional construction.

MAISONETTES

in MILITARY ROAD, CANTERBURY, KENT; designed by JOHN L. BERBIERS, city architect and planning officer C. W. GUMMER, deputy city architect; R. A. BARLOW, architect-in-charge; quantity surveyors WIDNELL and TROLLOP

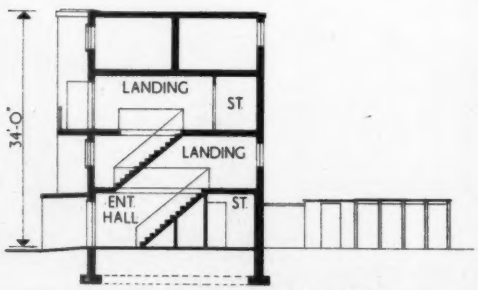
These maisonettes, which cost only 28 shillings per square foot of floor area, were designed by the Canterbury City Architects' Department in collaboration with the MOHLG. The JOURNAL publishes them because they are inexpensive, and although they leave a little to be desired æsthetically, are good value for money compared to much housing work carried out in this country.

The access side of the building, seen from the west.

building illustrated

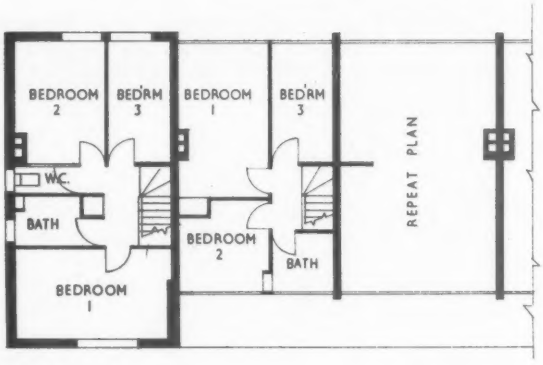
Above: detail of the entrance porches of the lower maisonettes. The hall of each maisonette is lit through the fully glazed door. The smaller battened doors give on to fuel stores.

Left: part of the south-east side of the building. The living rooms and main bedrooms look out on this side, with a rather unfortunate view of sheds, washing lines and concrete post fences. The television aerials erected by tenants have lead-in wires draped over the main fascia, a matter which should receive attention in future schemes.

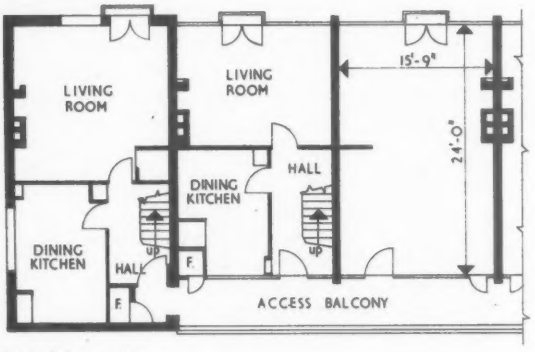


Section through stair tower [Scale: $\frac{1}{24}$" = 1' 0"]

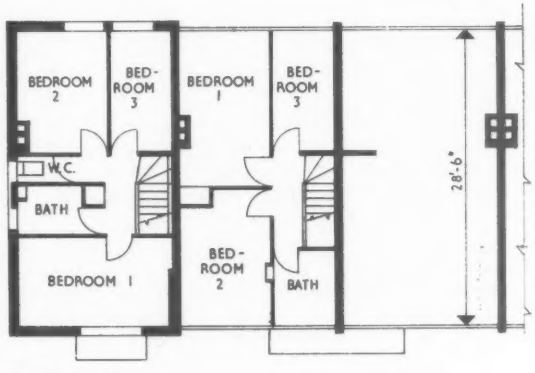
building illustrated



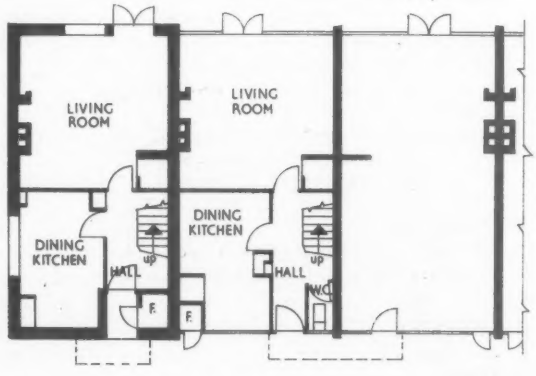
Third floor plan



Second floor plan



First floor plan



Ground floor plan [Scale: $\frac{1}{16}$" = 1'0"]

analysis

CLIENT'S REQUIREMENTS

24 maisonettes for the Canterbury City Council, to provide rehousing for four and five person families from slum clearance areas. The block was constructed to demonstrate possible methods of reducing costs by using cross wall construction.
Accommodation provided: 16 five-person and 8 four-person maisonettes. Average area, 800 sq. ft. per dwelling.

DESIGN

The design is based largely on the Ministry's economy memorandum, issued in 1954, which is shortly to be revised to incorporate some of the lessons learned from this scheme.
Features of the work which contribute particularly to economy may be summarized in this way:
1. The use of cross wall construction, giving a simple structure and economizing on foundation work.
2. Meticulous working out of all the constructional details, in which site methods were carefully considered. For example, it was possible to omit the use of scaffolding on one side of the block and experience has shown that it could be omitted from both sides. Dry partition units were used to reduce the amount of wet plastering and the superload.
3. Exceptionally full working drawings were completed before quantities were taken off.
4. Discussions were held with the contractor at the tender stage and before work began, so that his attention could be drawn to cost savings and he could programme his site work well in advance.
5. The keeping of variations during the course of work to a minimum. They amounted to less than ½ per cent on the contract sum.
6. The holding of regular site meetings.

	s	d
Cost per sq. ft.		
Preliminaries and insurances included in builders' prices		
Contingencies	2	¾

STRUCTURAL ELEMENTS

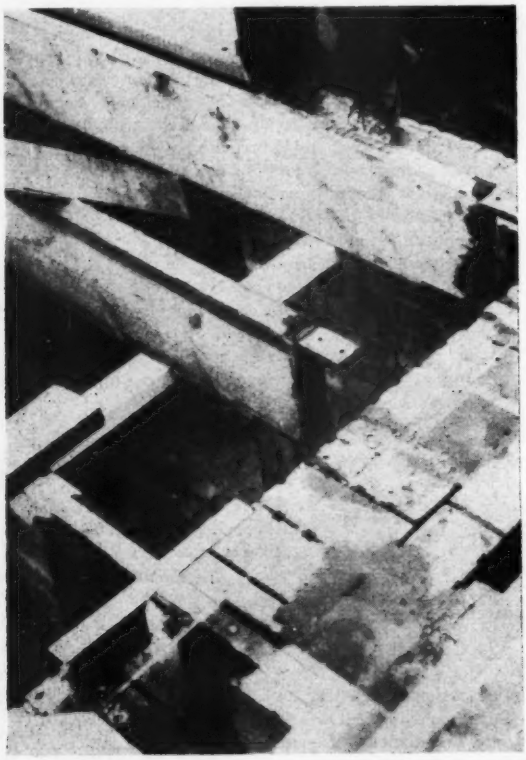
Work below ground floor level — 2 0¾
Strip foundation below brick load-bearing cross walls only. Foundations for one end " tower " unit and four of the cross walls go to a depth of 15 ft. for an adequate bottom.

Frame or load-bearing element — 3 7¾
9-in. cross walls, designed on the basis of recommendations of C.P. III (1948) for load-bearing walls, in two lower storeys bricks with an ultimate crushing strength of not less than 3,000 lb. per sq. in. Mortar mix, 1.1.6. Exposed ends of cross walls in class B engineering brickwork in waterproof mortar. Beam filling between floor joists in in situ concrete. The end " tower " units act as stabilizing elements to the block.

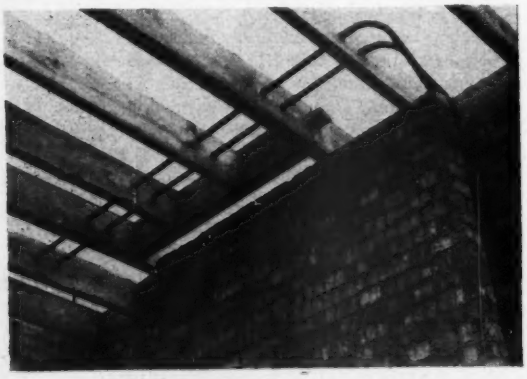
External walls — 1 5¼
Non-load-bearing panels, except to end lower units, and small brick apron walls.
Panels of softwood studding with hardwood cladding on the outside. ⅜-in. insulating plasterboard as inside lining.

building illustrated

Cross walls during construction with part of the centre " tower " in the foreground.



Joists at first floor at 13½ in. wall of end maisonette, behind fireplace. Note the special m.s. cruciform tie fixed with drive screws.



Holes for the hot water pipes were pre-drilled in the joists.

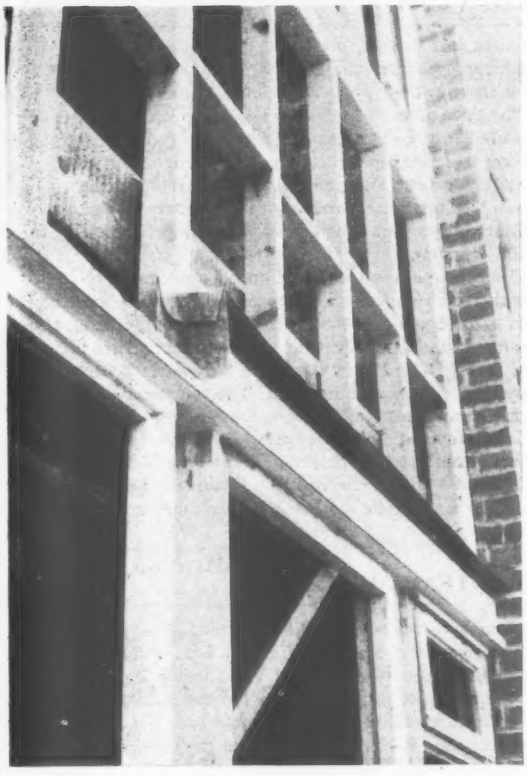
analysis

	s	d
Apron walls of 4½-in. brick leaf, ½-in. asphalt and 2½-in. P.F.A. block. Ratio: solid wall / floor area = ·609 / 1		
Windows EJMA standard wood windows, inward opening on balcony side. Ratio: windows / floor area = ·365 / 1	1	0
External doors Softwood fully glazed doors from living rooms, inward opening on second floor onto small balconies. Softwood main entrance doors. Ratio: doors / floor area = 0·051 / 1 25 doors, 2 ft. 9 in. × 6 ft. 6 in. 26 doors, 3 ft. × 6 ft. 6 in.		6½
Upper floors 15-ft. span onto cross walls. 1st and 3rd floors, timber joist and ⅞-in. boarding. Joist ends brush treated with preservative. 2nd floor, reinforced, continuous in situ concrete slab. Timber floors anchored into cross walls and designed for super load of 30 lb. per sq. ft., concrete for 40 lb. and balconies for 60 lb.	2	4½
Staircases 24 individual maisonette staircases in timber, 3ft. wide. 1 main staircase, r.c., 4 ft. 3 in. wide		10½
Roof construction Flat roof of wood joists, 2-in. woodwool and built-up bituminous felt roofing on screed. Joists anchored to cross walls. Area: 5,103 sq. ft. Roof to stores, asbestos sheet. Area: 400 sq. ft.	1	1
Glazing Generally, 24 oz. and 32 oz. Balcony balustrade in ¼-in. g.w.c.g.		5½
Total of structural elements	11	2½

PARTITIONING AND FITTINGS

Internal partitions 2-in. egg-crate core plasterboard panels to reduce weight and wet plastering, 2-in. breeze and 3-in. breeze. Area of each: Plasterboard, 885 sq. yds. 2-in. breeze, 372 sq. yds. 3-in. breeze, 108 sq. yds.	1	0½
Internal doors 178 single flush doors, hardboard faces, lattice core, fitted with 2-in. latches before delivery.		10
Ironmongery		3½
Fittings Sundry shelving and cupboards.		6
Total of partitions and fittings	2	7½

building illustrated



First floor external wall panel framing showing the lead flashing for the porch roof.

Woodwool slab roof showing in situ *concrete beam filling, the m.s. diagonal tie and the outmost joist kept back from the exposed end of the cross wall.*

analysis

FINISHES

	s	d
Floor finishes	1	9½
Type of finish: Thermoplastic tile, grano in entrance		
Area in sq. ft.: 8,000 sq. ft. 362 sq. ft. 1½-in. thick		
Price per sq. yd. 11s. 0d. 9s. 8d.		
Glass silk quilt and screed on upper concrete floor.		
Wall finishes	1	0
⅝-in. plaster finish in 2 coats to internal brick walls. No finish on plasterboard partitioning.		
Ceiling finishes		7½
½-in. plasterboard and skim plaster finish.		
Roof finishes		5½
3-layer built-up roofing with green mineral finish. 5,103 sq. ft.		
Decorations	1	5¾
Interior walls, distempered.		
Softwood, internal and external, oil paint.		
Hardwood cladding, untreated.		
Total of finishes	5	4¼

SERVICES

Plumbing					5½
4-in. single stack system with deep seal traps, carried internally in ducts. Rainwater pipes, also internal in same ducts, to reduce site excavation.					
Hot and cold water installation				2	2½
Combined hot and cold tanks used with back boiler from open fire. Cost includes builders' work in connection.					
Sanitary fittings					9½
24 baths, 24 lavatory basins.					
Heating and ventilation					4¾
Open fires and natural ventilation.					
"U" of walls: 0·24					
"U" of roof: 0·19.					
Gas installation					3¼
48 points: one in each maisonette for gas cooker, and ignition point for solid fuel fire.					
Electrical installation				1	11¾
Type of point:	Lighting	Power 30A	Power 15A	Washboiler	
No. of each type: 220		90	62	12	
Total of services				6	1

Drainage
Salt-glazed stoneware for soil drains. Rainwater to soakaways. Cost excluded.

Other elements
Balcony balustrading and coverings.

Total cost per sq. ft. : £29,671 9s. 8d. (excluding external works) / 21,188 sq. ft. (floor area inside external walls) =

analysis

TIME SCHEDULE

Tender: December, 1955.
Contract: July 16, 1956.
Work began: September, 1956.
Work finished: November, 1957.

General sequence of main constructional operations
September–October, 1956: Preliminary site works, all foundations, brickwork up to D.P.C. Hardcore and concrete to oversite complete, first floor joists fixed.
November–December, 1956: All soil drainage complete. All brickwork up to second floor level.
January–February, 1957: Concrete to second floor complete, third floor joists fixed, brickwork up to eaves level, main stairs complete.
March–April, 1957: Roof timbers fixed. External timber panels and hardwood cladding completed. Plumbing completed.
May–June, 1957: Backing to external brick apron walls completed. Dry partition walls erected.
July–August, 1957: Plastering completed, interior decoration in progress.
September, 1957: Entrance and garden paths laid out and work generally completed.
November, 1957: Work finished.

Type of contract: RIBA.
Tender price of foundations, superstructure, installations and finishes: £29,671 9s. 8d.
Tender price of external works and ancillary buildings: £3,505 10s.
Total: £33,176 19s. 8d.

Cost Savings
Cost comparisons have been based on prices received for similar dwellings of comparable type and size in the Canterbury area, built in orthodox construction, and inclusive of all work within the curtilage of the site.
(*a*) Tender price excluding external stores: £32,900.
(*b*) Average price per maisonette, $\frac{£32,900}{24} = £1,370$.
(*c*) Average price for similar dwellings in orthodox construction: £1,512.
(*d*) Cost saving per maisonette (*c*–*b*): £142.
(*e*) Cost saving per block of 24 maisonettes, 142 × 24: £3,408.

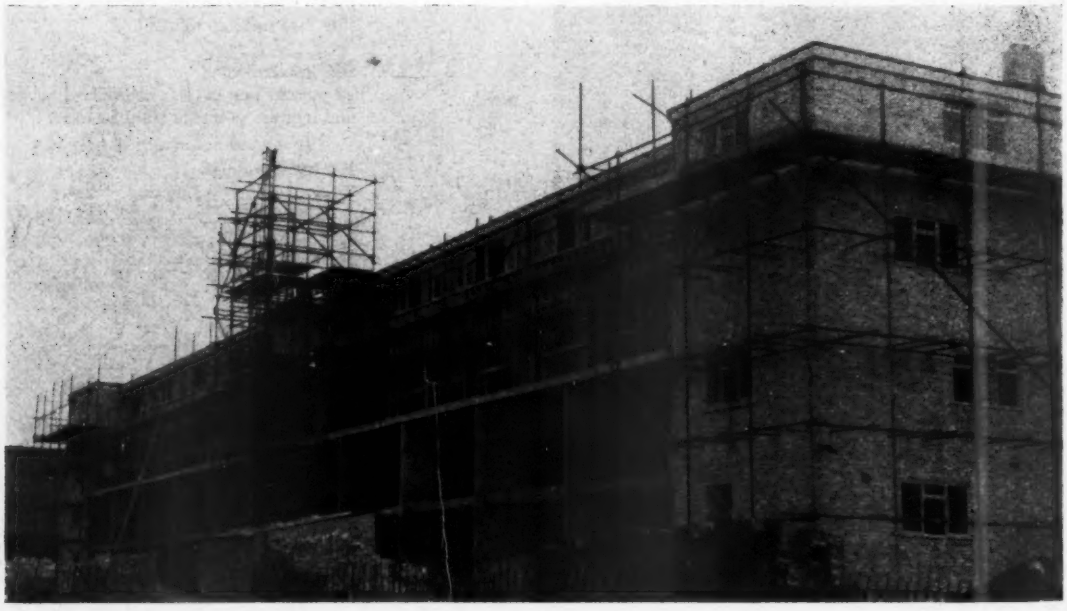
COST COMMENTS

As the cost analysis shows, this is a most economical scheme. It is interesting to compare it with the four-storey maisonettes built by West Ham (AJ October 17, 1957). The price of 5s 1d for framework and external walls, could hardly be challenged by any other project. At West Ham these elements, including the concrete floor, cost 11s 2¾d, which, after removing the concrete floor, leaves 9s 9d—directly comparable with Canterbury's 5s 1d. Canterbury's projecting access balcony must contribute to this economy.
Compare also wood wool and built-up roofing at 1s 1d with West Ham's more customary reinforced concrete at 2s 11¼d. Egg-crate plasterboard, unplastered, used on two thirds of the area of partitions at Canterbury costs 1s 0¼d as against West Ham's 1s 4¼d. In fact, such a scheme might well be even cheaper next time. The contractor now knows that he will meet but few variations and that he will need hardly any scaffolding. In areas where labour is more readily obtainable, a reduction in the time of 14 months might also be accompanied by a further cut in price. This is a milestone in maisonette development.

CONTRACTORS

General contractor: K. A. Hawkes Ltd. *Sub-contractors: Thermoplastic tiles:* Marley Tile Co. Ltd. *Balustrades:* Allen & Greaves Ltd. *Felt roofing:* The London Asphalte & Felt Roofing Co. *M.s. reinforcement:* Twisteel Reinforcement Ltd. *Electrical installation:* Court & Cooke Ltd. *Hot and cold water installation:* K. Hills. *Asphalt:* Val de Travers Ltd. *Doors:* Gliksten Doors Ltd. *Ironmongery:* Rowson Drew & Clydesdale. *Sanitary ware:* Alfred Olby Ltd.

General view of the building from the same viewpoint as the photograph on p. 467, taken during the cladding of the upper maisonettes. The crosswall construction and timber joisted first floor can be clearly seen.



technical section

INFORMATION CENTRE

19.212 construction: details
PREFABRICATED BRICK WALL

Brick Walls are Prefab Panels. (Engineering News Record [USA], Oct. 31, 1957, p. 28.)

Prefabricated panels which are load bearing are usually to be found in concrete. Tests have been carried out on a building in Illinois to provide load bearing panels of brickwork. The panels tested were 8 ft. high, 1 ft. wide and 2½ in. thick. Each contained 36 oversized facing bricks set directly above each other and tied together by a fast setting mortar at the production plant. In the building each panel is fastened by a bolt at the top and the bottom to a horizontal steel angle. Vertical joints between the panels were power mortared. The panels were lifted by a hoist using vacuum-lift cups and when bolted in position wood roof trusses were erected and bolted to the top angle. Five men placed the entire wall, 1,200 square feet of panels, in 8½ hours.

26.132 services and equipment: miscellaneous
HISTORY OF ELECTRICS

The History of Electric Wiring. John Mellanby. (Macdonald & Co. (Publishers) Ltd. 32s. 6d.).

Although this book has been prepared primarily for engineers, it should be of great interest to architects. Mr. Mellanby writes very well and always relates the technical achievement to its social background, starting with anecdotes of the installation at Hatfield House in 1881, going on to describe the doubts, expressed at the beginning of this century, as to whether it was worth installing electric lighting in working class houses, and so to the tremendous expansion of the twenties and thirties.

The early controversies are also of great interest, especially the fierce competition with the gas industry. Now that it is fashionable to attack all trade associations, the account of the situation which resulted in the formation of the Cable Makers' Association helps to put the problem in perspective. The second part of the book is devoted to a detailed study of the development of certain types of component. The account of the evolution of the tumbler switch is especially good, and invites comparison with Giedion's description of the evolution of the Yale Lock in Mechanization Takes Command. It is clear that the author is particularly interested in this subject, and we may hope for a more detailed monograph in due course.

This history has been published only just in time: in a very few years many things which formerly resided only in the memories of elderly men would have been lost for ever. We are greatly in Mr. Mellanby's debt.

8 ESTIMATING

current wage rates, market prices and measured rates

The sliding scale wage adjustment which takes place in February of each year, last month added a penny to wage rates in all regions. Thus on the following pages there are many asterisks, indicating a change since the last Prices issue of December 19. These are mostly of the order of a penny or two and apply more to "traditional" than to specialist trades. Current tenders may not reflect these increases. The only prices that have gone down substantially are the non-ferrous metals—copper, lead and aluminium, both pipe and sheet. The Prices feature is prepared by Davis, Belfield and Everest, chartered quantity surveyors.

Wage rates

Rates of wages rose on February 3, 1958, and are now as follows:

	Craftsmen	*Labourers*
London District	s d	s d
Within 12 miles radius	4 8½	4 2
From 12 to 15 miles radius	4 8	4 1½
Liverpool and District	4 8½	4 2
Grade classifications		
A	4 7	4 0½
A1	4 6½	4 0

Market prices

Prices are given for the major items in each trade, they are intended as average prices and include delivery in the outer London area. They do not include overhead charges and profit.

Measured rates

Prices are for work carried out in the Outer London area and include 10% to cover overhead charges and profit except in the case of work which would be carried out by specialists when 5% has been allowed.

The prices given in italic represent the total value of the materials included in the measured rates, including an allowance for waste and 10% for overhead charges and profit. The cost of labour included in the measured rates (including its proportion of overhead charges and profit) can be ascertained by subtracting the prices in italics from the prices in heavier type.

Abbreviations

Inches: in. Feet: ft. Yards: Y. Yards cube: YC. Yards super: YS. Feet cube: FC. Feet super: FS. Ton: T. Feet run: FR. Thousand: M. Square: Sq. Number: No. Hundredweight: C. Pound: lb. Gallon: Gal.

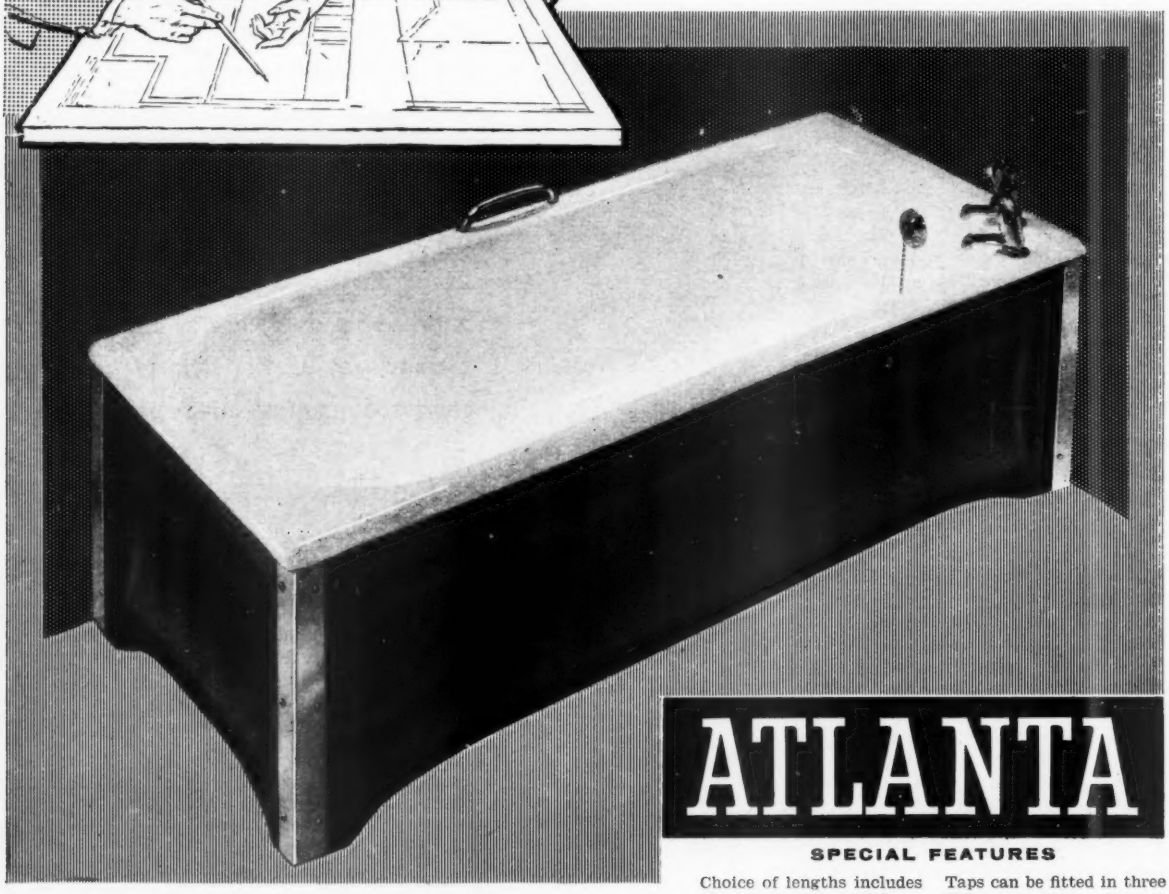
Preliminaries

To all estimates based on prices for measured rates add for Preliminaries, water, insurances, etc., depending on the nature of the job, say 10%

Price changes

* Shows changes in market prices and measured rates since the last issue (December 19, 1957).

..a BILSTON bath will be perfect...



ATLANTA

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Choice of lengths includes 72", 66", 61", 60" and 54".

Atlanta flat bottom helps to prevent slipping — a point of special importance if a shower is fitted.

Shallow step is safe for young and old. The Atlanta can be fitted to give an overall height of only 16".

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technical section

EXCAVATOR

Market prices

		s	d
Carting away, up to 8 miles	YC		
Hand loaded		8	0
Machine loaded		7	0
Hardcore	YC	10	0
Ashes	YC	10	6

Measured rates

Hand excavation and disposal

NB: the following are applicable to excavation in heavy soil.

		s	d
Excavating over site to remove top soil and vegetable matter, 6 in. deep	YS	*1	3
As above, 12 in. deep	YS	*2	6
Excavating over site to reduce levels and getting out	YC	*9	11
Excavating for basement and getting out	YC		
Depth up to 5 ft.		*11	2
Depth between 5 & 10 ft.		*16	2
Depth between 10 & 15 ft.		*21	2
Excavating surface trenches and ditto	YC		
Depth up to 5 ft.		*13	8
Depth between 5 & 10 ft.		*18	8
Depth between 10 & 15 ft.		*23	8
Excavating basement trenches and ditto	YC		
Commencing 5 ft. below existing ground level		*18	8
Commencing 10 ft. below existing ground level		*23	8
Commencing 15 ft. below existing ground level		*28	7
Wheeling surplus excavated material not exceeding 100 yards and depositing	YC	*4	11½
Add to last for:			
Roughly spreading and levelling	YC	*1	6
Spreading, levelling and consolidating to make up levels	YC	*3	3
Returning, filling-in and well ramming excavated material around foundations	YC	*4	4½
Loading surplus material into lorries and carting to tip, not exceeding 8 miles	YC	*16	0
Excavating from spoil heaps selected top soil, wheeling not exceeding 100 yards, and spreading, levelling and consolidating, not exceeding 6 in. to receive turf	YS	*2	2½

Mechanical excavation and disposal

		s	d
Excavating for shallow surface excavation and loading into lorries or dumpers (using ⅜ yd. cube excavator)	YC	3	0
Excavating for surface excavation and removing, spreading and levelling not exceeding 200 yds. (using 6 yd. cube scraper)	YC	2	7½
Removing excavated material and depositing, not exceeding 200 yds. (using 3 yd. cube dumper)	YC	2	0

Planking and strutting

		s	d
Planking and strutting to sides of surface or basement excavation	FS		
Depth up to 5 ft.			8
Depth up to 10 ft.			10
Depth up to 15 ft.		*1	0
Planking and strutting to sides of surface and basement trenches	FS		
Depth up to 5 ft.			2
Depth up to 10 ft.			3½
Depth up to 15 ft.			4

Hardcore, etc.

		s	d
Hardcore filled-in in layers, each layer well rammed	YC	20	5
		13	*9*
Bed of ditto, 4-in. thick	YS	3	5
		1	*6½*
Ash filled-in in layers, each layer well rammed	YC	19	11
		14	*5*

CONCRETOR

Market prices

		s	d
Portland cement, 6 tons and over	T	113	6
Rapid hardening, 6 tons and over	T	124	0
¾-in. down, washed, crushed and graded shingle	YC	18	1
1½-in. ditto	YC	17	2
Sharp sand	YC	22	1
⅝-in. diam. mild steel rods to BS 785 delivered station	T	836	6
⅜-in. ditto	T	929	0

Measured rates

		s	d
Portland cement mass concrete in foundations etc.	YC		
1 : 12, 1½-in. "all-in" aggregate		*60	9
		40	*4*
1 : 3 : 6, 1½-in. aggregate		*69	1
		48	*8*
1 : 2 : 4, ¾-in. aggregate		*76	6
		56	*1*
1 : 1½ : 3, ½-in. aggregate		*78	1
		57	*9*
Add for:			
Working around rod or mesh reinforcement	YC	*4	11½
Walls not over 6-in. thick	YC	*24	10
Walls 6-in. to 12-in. thick	YC	*17	5
Walls over 12-in. thick	YC	*12	5
Columns not over 72 sq. inches	YC	*47	3
Columns 72 to 144 sq. inches	YC	*37	3
Columns over 144 sq. inches	YC	*29	10
Suspended floors and roofs not over 4½-in. thick	YC	*19	11
Suspended floors over 4½-in to 6-in. thick	YC	*17	5
Suspended floors over 6-in. to 12-in. thick	YC	*14	11
Beds not over 4½-in. thick	YC	*9	11
Beds 4½-in. to 6-in. thick	YC	*7	5
Beds 6-in. to 12-in. thick	YC	*2	6
Hollow tile floor of clay tiles 4-in. thick at 15-in. centres laid on formwork (measured separately), nibs filled in with concrete (1 : 2 : 4) and finishing top of tiles with bed of concrete 1½-in. thick including tamping around reinforcement (measured separately)	YS	*17	6
		10	*4*
Ditto, but tiles 8-in. thick	YS	*27	0
		18	*0*

Sundries

		s	d
Finishing concrete with trowelled face to receive linoleum	YS	1	2½
Applying horizontal damp-proof membrane of Synthaprufe in three coats to surface of concrete and blinding with sand to form key	YS	5	9
		4	*1*
Supplying floor clips (p.c. 6d. each) and fixing	No.	*1	1

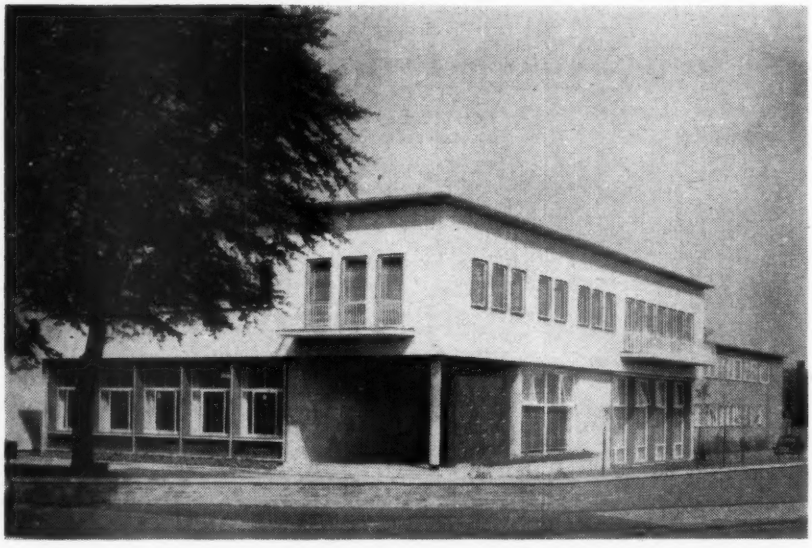
Formwork

Formwork including strutting easing and striking:

		s	d
Vertical faces of foundation	YS	*18	4
		9	*6*
Vertical faces of wall	YS	*18	10
		6	*11*
Soffite of floors not over 12-ft. high	YS	*18	8
		8	*6*
Sloping soffite of stairs	YS	*22	7
		9	*3*
Sides of columns	FS	2	5
			10½
Sides and soffites of lintols and beams	FS	2	7
		1	*0*
Add to the above for wrot formwork including rubbing down concrete	YS	*2	6

Reinforcement

		s	d
⅝-in. diameter mild steel rods, hooked, bent and tied and fixing	C	*66	11
		50	*9*
½-in.	C	*74	0
		54	*5*
⅜-in.	C	*80	6
		56	*3*



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technical section

Concretor continued		s	d
½-in.	C	*94	0
		60	*11*
Steel wire mesh fabric weighing 4·32 lb. per yd. super and laying in concrete	YS	4	1
		3	*5*
Ditto weighing 6·57 lb. per yd. super	YS	6	0
		5	*3*
Ditto weighing 9·32 lb. per yd. super	YS	8	6
		7	5
Precast concrete			
Precast concrete (1 : 2 : 4) finished fair on exposed faces and hoisting setting and jointing:			
4½-in. × 6-in. lintols reinforced with one ½-in. rod	FR	2	8
		2	2½
4½-in. × 9-in. ditto with two ½-in. rods	FR	4	0
		3	3½
Piling			
Reinforced pre-cast concrete piles, approximate prices for supplying, unloading, pitching and driving			
12-in. × 12-in. up to 30 ft. long	FR	34	0
14-in. × 14-in. up to 50 ft. long	FR	40	0
Sheet steel piling, ditto	T	1176 to 1680	0 0

BRICKLAYER

Market prices

Soft sand	YC	18	0
Hydrated lime	T	117	6
Plain Flettons	M	118	0
Second hard stocks	M	300	0
Lingfield Engineering wire cuts Grade B	M	256	0

Partitions

Clinker concrete, solid	YS		
2-in.		3	9
2½-in.		4	4
3-in.		5	3
4-in.		6	5
Thermalite-Ytong	YS		
2½-in.		7	0
3-in.		8	5
4-in.		11	0
Hollow clay	YS		
2-in.		4	5
2½-in.		4	8
3-in.		5	5
(6 cavity) 4-in.		6	10
Normal quality wood wool slabs	YS		
2-in.		8	10
2½-in.		10	2
3-in.		11	5

Measured rates

Reduced brickwork in cement lime mortar.

		s	d
Lingfields in cement mortar	YS		
Flettons		*33	3
		17	*7*
Second stocks		*52	11
		37	*2*
Lingfield Grade B		*50	11
		32	*9*
Half brick wall ditto	YS		
Flettons		*18	3
		8	*4*
Second stocks		*28	1
		18	*1*
Lingfield Grade B		*27	8
		15	*10*
11-in. hollow wall with 2-in. cavity and wall ties	YS		
Flettons		*39	10
		17	*1*
Second stocks		*59	5
		36	*8*
One brick wall built fair and pointed both sides	YS		
Flettons		*39	10
		17	*7*
Second stocks		*59	5
		37	*2*
Lingfield Grade B		*56	4
		32	*9*

Sundries

Extra over common brickwork for internal fair face and flush pointing	YS	1	4
Horizontal damp proof course of two courses of slates and bedding and pointing	FS	4	2
		2	5
Horizontal damp proof course of hessian base bitumen	FS		11
			9

Facings

Extra over ordinary brickwork with bricks P.C. 118s. per 1,000 for facings as described

To solid wall in Flemish bond	YS		
Facings P.C. 250s per M		*15	9
		9	*7*
Facings P.C. 350s per M		*23	0
		16	*11*
Facings P.C. 450s per M		*30	3
		24	*2*
To cavity wall in stretcher bond	YS		
Facings P.C. 250s per M		*13	0
		7	*4*
Facings P.C. 350s per M		*18	6
		12	*11*
Facings P.C. 450s per M		*24	1
		18	*5*
Half brick wall in facings built fair and pointed on one side	YS		
Facings P.C. 250s per M		*30	0
		16	*0*
Facings P.C. 350s per M		*35	6
		21	*6*
Facings P.C. 450s per M		*41	1
		27	*1*

Partitions

Clinker concrete solid partition blocks and setting in cement lime mortar	YS		
2-in.		*9	1
		4	*8*
2½-in.		*10	6
		5	*6*
3-in.		*12	6
		6	*7*
4-in.		*15	2
		8	*1*
Thermalite-Ytong ditto	YS		
2½-in.		*12	8
		8	*6*
3-in.		*15	0
		10	*3*
4-in.		*19	1
		13	*4*
Hollow clay ditto	YS		
2-in.		*9	10
		5	*5*
2½-in.		*10	11
		5	*10*
3-in.		*12	8
		6	*10*
(6 cavity) 4-in.		*15	8
		8	*6*
Wood wool slabs ditto	YS		
2-in.		*14	1
		10	*6*
2½-in.		*16	3
		12	*2*
3-in.		*18	5
		13	*9*

DRAINLAYER

Market prices

Salt glazed stoneware pipes and fittings, "Best" quality:

Ordinary pipes	FR		
4-in.		1	7½
6-in.		2	5½
9-in.		4	4½
Bends	No.		
4-in.		4	10½
6-in.		7	3¾
9-in.		19	9

The above are Standard List prices less 2½%.

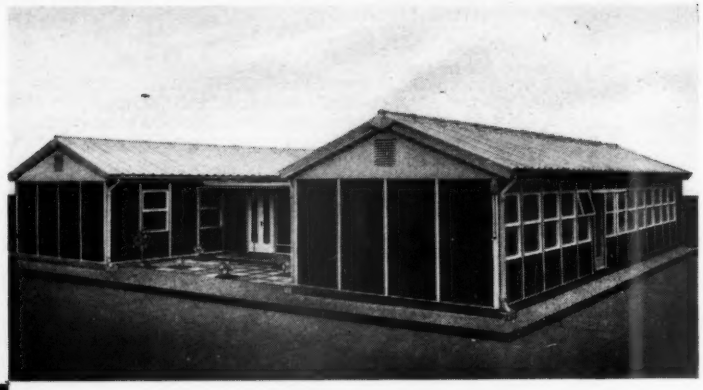
Pitch fibre pipe	FR		
3-in.		1	10¾
4-in.		2	6
6-in.		5	0¾
Cast iron s. and s. pipe to BS 437	YR		
4-in.		28	2
6-in.		41	3
9-in.		77	3
Spun iron s. and s. pipe to BS 1211, Class B	YR		
4-in.		13	3
6-in.		21	3
9-in.		35	8

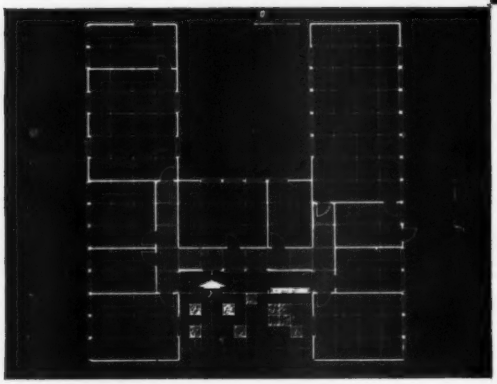
Measured rates

Trenches and beds

Excavate trenches by hand in heavy soil, including planking and strutting, part returning, filling and ramming and wheeling and spreading surplus, for pipes 4-in., 6-in. and 9 in. dia.	YR		
Average depth of trench 3-ft.		*16	9
4-ft.		*22	3
6-ft.		*39	0
9-ft.		*71	9
Excavate trench as last but by mechanical trencher	YR		
Average depth of trench 3-ft.		*12	8
4-ft.		*17	4
6-ft.		*32	0
9-ft.		*52	10

Attractively designed 'Middlesex' Prefabricated Timber Buildings are fast achieving a name for dependability and economy. The architect-designed 'Middlesex' System uses the minimum number of basic components, yet is sufficiently flexible to meet most requirements. Shown here is a typical 'Middlesex' Office Block consisting of two 60ft. by 16ft. wings connected by a 24ft. entrance link.





'Middlesex' Prefabricated Buildings are the complete answer to problems involving temporary or semi-permanent accommodation suitable for tropical or temperate climates. Delivery is prompt, erection rapid and simple, and modifications and extensions can easily be incorporated after erection. Supplied in a variety of interior and exterior finishes, the 'Middlesex' System can provide accommodation for a whole community, including even cinemas and churches.

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technical section

Drainlayer continued

		s	d
6-in. concrete bed and benching for 4-in. pipes	YR	*9	6
		5	10
As above, for 6-in. pipes	YR	*11	1
		6	10
6-in. concrete bed and surround for 4-in. pipes	YR	*15	5
		9	6
As above, for 6-in. pipes	YR	*18	7
		11	5

Stoneware drains

		s	d
" Seconds " quality salt glazed stoneware drain pipes and laying and jointing in trench	FR		
	4-in.	2	5
		1	8
	6-in.	3	5
		2	6
	9-in.	5	8
		4	7
" Best " quality salt glazed stoneware drain pipes and laying and jointing in trench	FR		
	4-in.	2	9
		2	0
	6-in.	3	10
		2	11
	9-in.	6	5
		5	4

Extra over " Seconds " quality pipes for:

		s	d
Bend	No.		
	4-in.	*3	9
		3	3
	6-in.	5	6
		4	11
	9-in.	16	0
		15	4
Single junction	No.		
	4-in.	*6	6
		5	0
	6-in.	*9	4
		7	6
	9-in.	*20	1
		18	0
Double junction	No.		
	4-in.	10	9
		8	4
	6-in.	*15	6
		12	6
	9-in.	30	6
		27	1

Stoneware gullies

		s	d
Salt glazed trapped gully with galvanized grating including setting gully on and surrounding with concrete and jointing to drain	No.		
6 in. × 6 in. grating 4 in. outlet		*26	5
		22	3
9 in. × 9 in. grating 6 in. outlet		*43	7
		38	3
Grease and mud gully 9-in. diameter with 4-in. outlet galvanized bucket and grating and setting gully on and surrounding with concrete and jointing to drain	No.	*92	0
		81	2
Road gully with 6-in. outlet including setting on and surrounding with concrete and jointing to drain	No.		
15-in. dia. 30-in. deep		*108	7
		86	6
18-in. dia. 48-in. deep		*216	5
		180	0

Pitch fibre drains

		s	d
Pitch fibre drain pipes and laying and jointing in trench	FR		
	3-in.	2	3
		2	1½
	4-in.	2	11½
		2	9½
	6-in.	5	10
		5	8
Extra over pitch fibre pipe for 45° bend	No		
	3-in.	13	11
		13	1
	4-in.	22	1
		21	3
	6-in.	35	3
		34	3

Cast iron drains

		s	d
Cast iron spigot and socket drain pipes and laying and jointing in trench	FR		
	4-in.	13	1
		11	0
	6-in.	*19	1
		16	4
	9-in.	*36	4
		30	7
Extra over cast iron pipes for bend	No.		
	4-in.	*31	4
		25	2
	6-in.	*73	2
		64	2
	9-in.	*186	5
		170	10
Spun cast iron spigot and socket drain pipes and laying and jointing in trench	FR		
	4-in.	7	6
		5	5
	6-in.	*11	7
		8	11
	9-in.	*20	9
		15	0

Cast iron gullies

		s	d
Cast iron gully trap with high invert and setting on and surrounding with concrete and jointing to drain	No.		
	4 in.	*45	9
		37	3
	6 in.	*111	8
		99	2
	9 in.	*247	7
		230	9

ASPHALTER

Measured rates

Damp proof course and tanking

		s	d
½-in. vertical damp proof course in two thicknesses on brick or concrete	YS		
	BS1097	17	10
	BS1418	24	2
½-in. horizontal damp proof course in one thickness on brick or concrete	YS		
	BS1097	11	7
	BS1418	15	9
Vertical tanking in three thicknesses	YS		
	BS1097	26	3
	BS1418	33	7
Horizontal tanking in three thicknesses	YS		
	BS1097	19	5
	BS1418	29	5

Roofing

		s	d
¾-in. flat laid to falls in two thicknesses on and including felt underlay	YS		
	BS988	13	8
	BS1162	22	1
6-in. skirting with angle fillet at bottom and rounded edge at top turned into groove	FR		
	BS988	2	4
	BS1162	2	11
6-in. fascia with solid water check roll at top and under-cut drip at bottom	FR		
	BS988	4	6
	BS1162	5	3

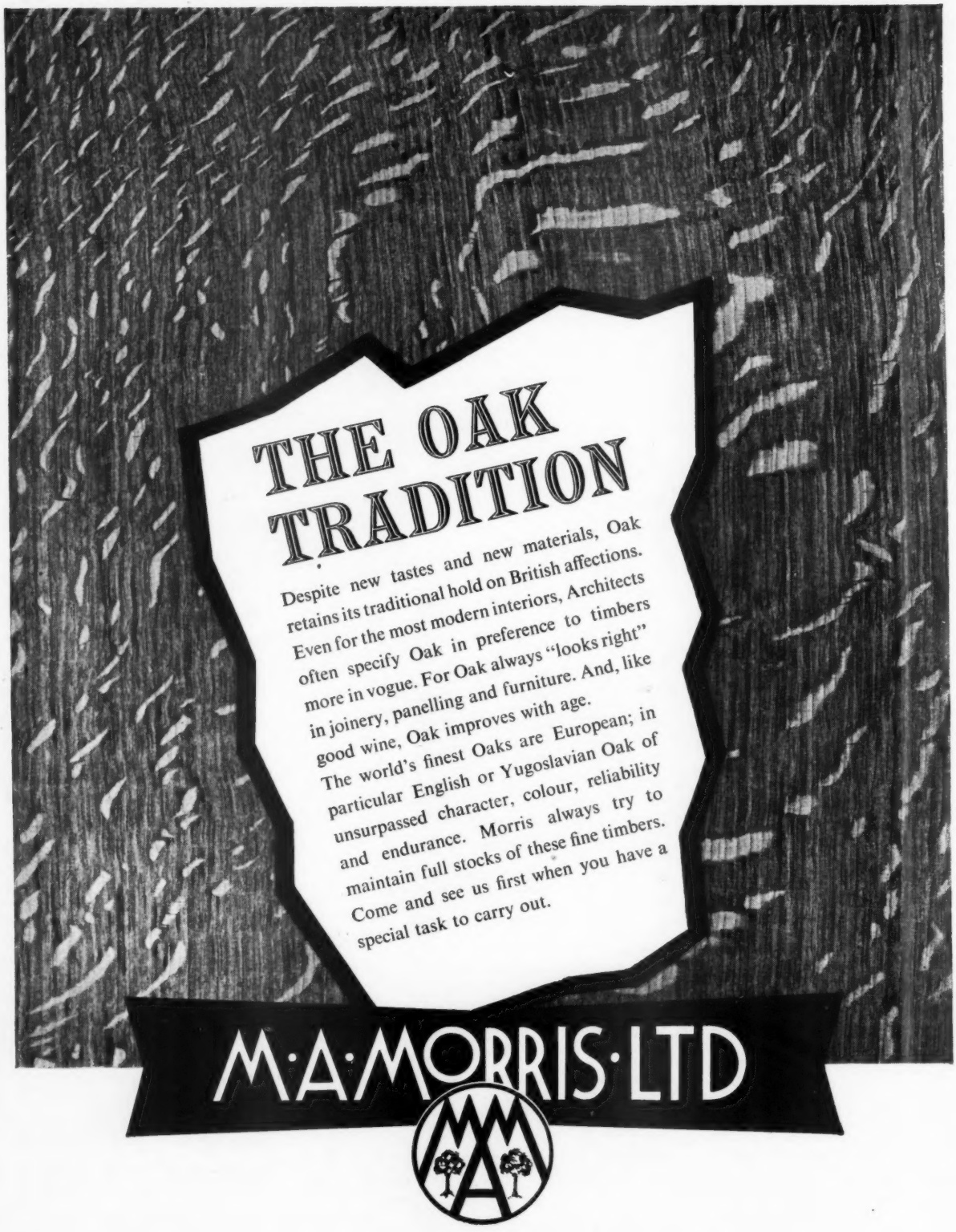
PAVIOR

Market prices

		s	d
Granite chippings, ¼-in. to dust	T	50	2
Buff quarry tiles, 6 in. × 6 in. × ⅞ in.	YS	22	0
2-in. Noelite paving	YS	13	11

Measured rates

		s	d
Cement and sand floated screed to receive pavings	YS		
	¾-in.	4	1
		2	4
	1-in.	*5	0
		3	0
	1¼-in.	5	7
		3	6
Cement and sand paving trowelled hard and smooth	YS		
	¾-in.	4	7
		2	4
	1-in.	*5	6
		3	0
	1¼-in.	6	1
		3	6
Granolithic paving laid on concrete	YS		
	1-in.	7	4
		5	4
	1½-in.	9	5
		7	0
½-in. red composition paving laid on prepared screed	YS	16	6
⅝-in. terrazzo paving laid on prepared screed	YS	38	4
⅛-in. rubber flooring and laying in rolls	YS	39	5
¼-in. rubber flooring and laying in rolls	YS	63	0
5/16-in. cork tile flooring, 12 in. × 12 in. and fixing with mastic and including polishing	YS	45	11
⅛-in. thermoplastic tile flooring and laying-on screed	YS	12	0
		to	
		21	0
⅛-in. coloured linoleum and fixing with mastic to cement screed or boards	YS	*26	9


THE OAK TRADITION
Despite new tastes and new materials, Oak retains its traditional hold on British affections. Even for the most modern interiors, Architects often specify Oak in preference to timbers more in vogue. For Oak always "looks right" in joinery, panelling and furniture. And, like good wine, Oak improves with age.
The world's finest Oaks are European; in particular English or Yugoslavian Oak of unsurpassed character, colour, reliability and endurance. Morris always try to maintain full stocks of these fine timbers. Come and see us first when you have a special task to carry out.
M·A·MORRIS·LTD
RAVENSDALE WHARF • STAMFORD HILL • LONDON • N.16 • TEL STAMFORD HILL 6611 (6 lines)

Pavior continued s d

⅛-in. coloured linoleum and fixing with mastic to cement screed or boards YS *21 3

⅞-in. buff quarry tiles laid on prepared screed YS *37 1

⅞-in. blue black quarry tiles laid on prepared screed YS *34 9

2-in. Noelite paving laid on prepared bed, in random sizes and mixed colours YS *20 1
16 1

12 in. × 12 in. anchor steel plates laid complete YS *55 1

MASON

Market prices

Stone in blocks in truckloads at stations in the London area:

Beer FC 8 9

Portland FC 8 8

Woodkirk Blue building quality FC 17 11

Broughton Moor slate in blocks at stations in the London area FC 65 0

Marble in blocks at works: Dove FC 70 0

Roman stone FC 70 0

Measured rates

Stone and all labours in pilasters and quoins FC
Portland 55 2
Beer 51 5

Jambs FC
Portland 55 2
Beer 51 5

Lintols FC
Portland 56 2
Beer 52 6

Arches FC
Portland 67 3
Beer 60 5

Ashlar average 7-in. on bed with plain dressed face FS
Portland 31 3
Beer 29 11

Extra for each additional 1-in. thickness FS
Portland 3 7
Beer 3 5

4½ in. × 4 in. sill sunk, weathered, throated and grooved for water bar, set and jointed in cement mortar FR
Portland 11 7
Beer 10 11
Artificial 4 8

4 in. × 12 in. coping, weathered and twice throated FR
Portland 22 1
Beer 21 2
Artificial 11 3

Marble and slate

¾-in. Dove marble lining and fixing on brick backings FS 36 9

¾-in. Roman stone lining FS 36 9

¾-in. Broughton Moor slate lining FS 39 11

SLATER TILER AND ROOFER

Market prices

Welsh slates, best quality M
16-in. × 10-in. 1038 6
20-in. × 10-in. 1914 3

Best hand made sand faced plain tiles. 10½-in. × 6½ in. M 315 0

Grey corrugaged asbestos cement sheets YS 7 0

Measured rates

16-in. × 10-in. best Welsh slates laid 3-in. lap Sq. 310 0

20-in. × 10-in. best Welsh slates 3-in. lap Sq. 412 0

Westmorland green slates in random sizes laid 3-in. lap Sq. 632 9

Best hand made sand faced plain tiles, 10½in. × 6½in. laid to a 4-in. gauge Sq. 221 0

Best hand made sand faced plain tiles, 10½-in. × 6½-in. hung vertically to 4½-inch gauge Sq. 237 0

Berkshire hand made sand faced red pantiles, 14½-in. × 10-in. laid 2½-in. head and 1½-in. side lap Sq. 213 0

Grey corrugated asbestos cement sheets fixed to wood roofs Sq. 129 3

Grey corrugated asbestos cement sheets fixed vertically Sq. 139 3

Cedarwood shingles laid 5-in. gauge Sq. 258 0

Metal roof decking and fixing with hook bolts, finished with ½-in. insulation board and three layers self finish felt roofing YS
18 gauge for spans up to 10 ft. 57 6
20 gauge for spans up to 8 ft. 6 in. 50 0

Two layer one ply bitumen felt and fixing with bitumen to concrete or boarding YS 9 5

Three layer bitumen felt YS 12 7

Patent ribbed aluminium roofing and fixing to purlins Sq. 287 6

CARPENTER

Market prices

Softwood, carcassing quality Std. 1910 0

Softwood, joinery quality Std. 2160 0

½-in. fibre board Sq. 45 0

⅛-in. standard hardboard Sq. 40 0

⅜-in. insulating gypsum wallboard YS 3 3

Measured rates s d

Softwood and fixing in plates, sleeper joists and lintols FC *15 9
13 10

In floor and ceiling joists FC *18 0
13 10

In stud partitions, purlins and struts FC *20 2
13 10

In hip and valley rafters FC *22 9
13 10

Battening and boarding

Slate or tile battens 1½ in. × ¾-in. and nailing to fixing for Sq.

16-in. × 10-in. slating to 6½-in. gauge 39 0

20-in. × 10-in. slating to 8½-in. gauge 32 0

10½-in. × 6½-in. plain tiling to 4-in. gauge 56 0

14½-in. × 10-in. pantiles to 12-in. gauge 22 0

S.E. boarding in batten widths close jointed and fixing to flat or sloping roofs Sq.
¾-in. *120 6
87 9
1-in. *148 3
115 6

T. & G. boarding in batten widths close jointed and fixing to flat or sloping roofs Sq.
¾-in. *139 0
98 0
1-in. *170 2
129 0

¾-in. wrot and cross tongued eaves soffit FS 2 3
1 0

¾-in. × 6-in. wrot and grooved eaves fascia p.o. FS 10
6

Wall and ceiling boards fixed to softwood YS

½-in. fibre board 6 6
4 10

⅛-in. hardboard 5 9
4 4

⅜-in. insulating gypsum wallboard 5 8
4 0

3/16-in. asbestos cement flat sheeting 8 6
4 11

¼-in. asbestos cement flat sheeting 10 3
6 8

2-in. Stramit, showerproof quality fixed to joists with butt joints *15 8
11 5

JOINER

Measured rates

Floors and skirtings

Tongued and grooved softwood flooring and nailing to joists Sq.
⅞-in. *164 9
126 6
1-in. *182 6
144 0

1-in. nominal double grooved t. and g. Swedish softwood

To-morrow's citizens gain their freedom...

but

RUNNYMEDE

RUBBER FLOORING

remains unruffled!

At 4.0 p.m. each day the Torch of Learning flickers a shade lower as juvenile energy is released, *en masse*. The thunder of little hooves down the corridor would make an ordinary floor curl up in dismay, but Runnymede never flinches. Tough and resilient, it's born and bred to take rough punishment day in day out, sports days included. Economists praise it for low cost and long life; designers enthuse about its exquisite contemporary tones. Write or 'phone us and we'll be happy to show you why.

RUNNYMEDE RUBBER CO LTD · 6 OLD BAILEY · LONDON · EC4 · Tel: CITy 2471

technical section

Joiner continued

		s	d
block flooring set in mastic and polished	YS	29	5
European beech	YS	*32	7
African Muhuhu	YS	*37	10
Burma teak	YS	*48	4
Moulded skirtings, 3-in. to 6-in. sectional area planted on (per inch in sectional area)	FR		
Softwood			3½
			2½
Oak			9
			7½
Extra for grounds plugged to brickwork	FR		
Softwood			9
			2

Windows

		s	d
2-in. rebated and moulded sashes divided into squares	FR		
Softwood		3	8
Oak		*10	11
Extra for side hanging	Each		
Softwood		2	9
Oak		*4	2

Doors

		s	d
2-in. framed, ledged and braced doors, filled in with 1-in. T and G and V jointed boarding and hanging	FS		
Softwood		*6	2
		5	5
Four panelled door square both sides and hanging	FS		
Softwood		6	8
		6	0
Oak		19	6
		18	6
1½-in. Standard flush door, hardboard faced size 2-ft. 6-in. × 6-ft. 6-in. and hanging	No.	*42	2
		31	1

Linings and frames

		s	d
Window and door linings, 6-in. to 12-in. sectional area (per inch sectional area)	FR		
Softwood			4
			3
Oak			9
			8
Frames wrot all round and framed (per inch sectional area)	FR		
Softwood			3½
Oak			8
Mullions, transomes and cills (per inch sectional area)	FR		
Softwood			4
Oak			9
Mouldings, architraves, etc. 4-in. to 6-in. sectional area (per inch sectional area)	FR		
Softwood			4
			3
Oak			10
			9
6-in. window boards, 1-in. thick with rounded nosing tongued at back and including bearers	FR		
Softwood		3	0½
		1	8

		s	d
Oak		5	6
		3	7

Shelving and fittings

		s	d
¾-in. shelving of 2-in. slats spaced 1-in. apart on bearers (measured separately)	FS		
Softwood		*2	6
		1	11
¾-in. solid shelving on bearers	FS		
Softwood		2	3½
		1	11
Oak		4	8
		4	1
2-in. shelf bearers plugged to wall	FR		
Softwood			7½
			5½
Oak		1	2
			11½

Staircases

		s	d
1-in. treads and ¾-in. risers tongued together on and including framed carriages	FS		
Softwood		4	7½
		3	6½
Oak		13	6
		12	0
1¾-in. × 11-in. wall string plugged to brickwork	FR		
Softwood		4	5
		3	5
Oak		11	5
		10	1
1¼-in. × 11-in. outer string	FR		
Softwood		3	4½
		2	10
Oak		6	11
		6	2
Ends of treads and risers housed to strings	No.		
Softwood		1	4½
Oak		6	2
2½-in. × 3-in. moulded handrail	FR		
Softwood		3	1½
		2	6
Oak		6	5
		5	7
1¼-in. × 1¼-in. square balusters	FR		
Softwood			8½
			6½
Oak		1	4
		1	1
Framed ends to balusters	No.		
Softwood			6½
Oak			9

IRONMONGER

Market prices

As prices for ironmongery vary so greatly depending upon the type and quality required no prices are quoted here

Measured rates

The rates which follow are for fixing only and are inclusive of profit

		s	d
3-in. steel butts	Pr.		
to softwood		*4	5
to hardwood		*5	11
Double action floor springs	No.		
to softwood		*22	3
to hardwood		*29	7
6-in. barrel bolts			
to softwood		2	0
to hardwood		2	8
Cupboard locks			
to softwood		*4	2
to hardwood		*5	7
Cylinder night latch			
to softwood		*6	11
to hardwood		*9	3
Mortice latch			
to softwood		*5	7
to hardwood		*7	5
Mortice lock			
to softwood		*6	11
to hardwood		*9	3
Casement fastener			
to softwood		1	8
to hardwood		*2	3
Casement stays			
to softwood		1	8
to hardwood		*2	3

STEEL & IRONWORKER

Market prices

Structural steel joist sections, basis sizes, ex mills	T	822	6

Extras for other than basis sizes vary between 10s. and 70s. per ton

Measured rates

Rsj in steel framed structures hoisted and fixed complete	T	*1620	0
Riveted compound girders including plates and rivets	T	*1900	0
Rs stanchions including caps, bases, cleats etc.	T	*1880	0

Metal windows including cutting and pinning lugs to brickwork and bedding frames in cement mortar No.

Domestic type 4 ft. high to BS 990		
Type ND2F 3 ft. 3¼ in. wide	*91	0
	75	2
Type HD2F 3 ft. 3¼ in. wide	*98	4
	82	6
Type ND11F 6 ft. 6½ in. wide	*156	3
	128	4
" Z " range, 4 ft. high		
Type ZND1 2 ft. 0¾ in. wide	*61	10
	51	4
Type ZND4F 6 ft. 0¾ in. wide	*157	9
	129	10

PLASTERER

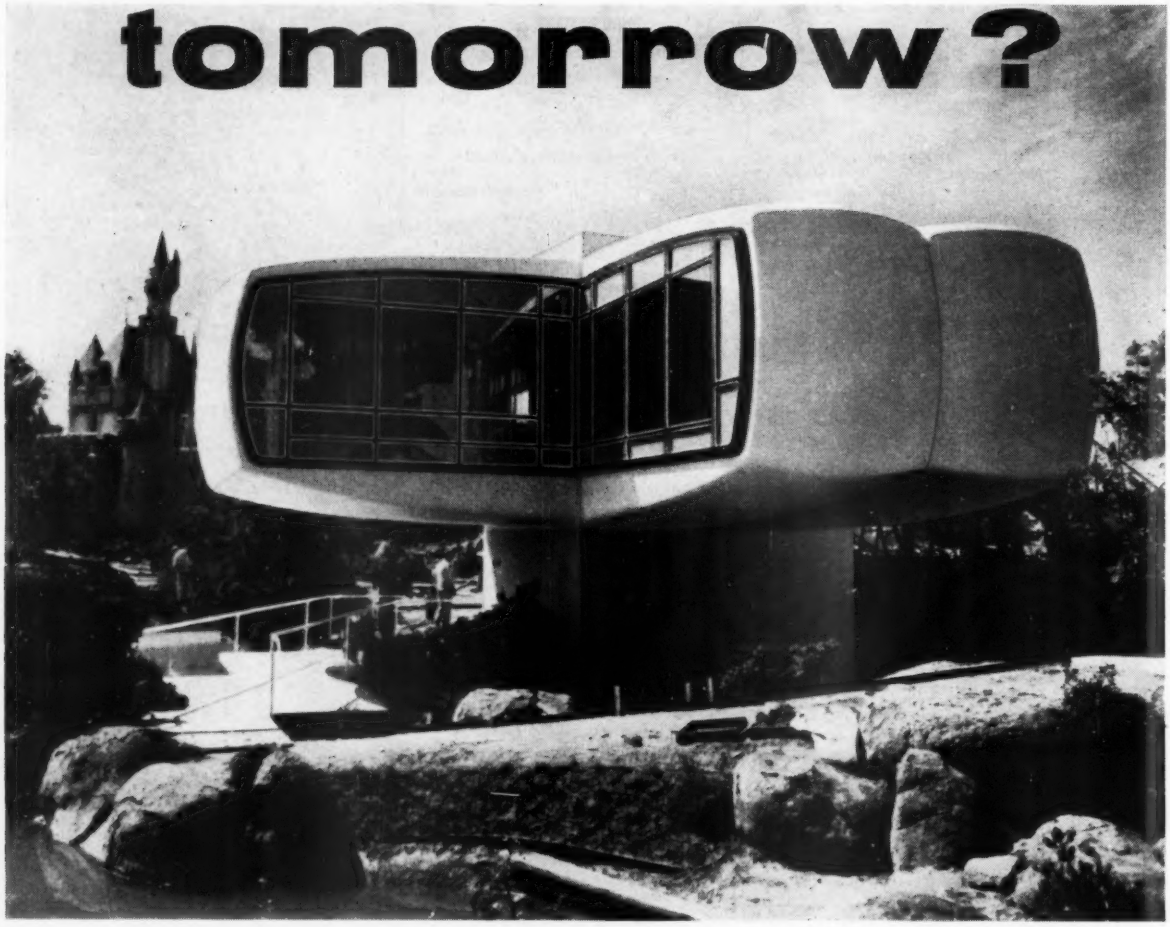
Market prices

Plastering sand	YC	22	1

Plaster to BS 1191

This 'House of Tomorrow' was conceived by the Monsanto Chemical Company in co-operation with twelve building supply and home equipment companies. The gleaming white structure took three years to complete. The four curved wings are cantilevered from a central utility core. The entrance is near the core which contains the kitchen, bathroom, laundry and other working areas. In the four wings are grouped the living area, the dining area and the sleeping areas.

tomorrow?



Whether you admire it or not, you must admit that this American exercise in futurism offers food for thought. A plastic structure of this size was outside the realm of possibility until glass fibre reinforcement came into the picture. Now, it is coming into a lot of pictures, on both sides of the Atlantic—as architects appreciate that a new basic structural material is to hand: a material which suggests, permits, and even demands entirely new structures.

You are, perhaps, aware that Fibreglass Reinforced Plastics are easily moulded into complicated shapes, and that they have a very high strength to weight ratio. But there is a lot more to it—as The Fibreglass Technical Advisory Service would be glad to tell you.

See the future through

FIBREGLASS TRADE MARK

the backbone of Reinforced Plastics FIBREGLASS LTD., ST. HELENS, LANCASHIRE. ST. HELENS 4224

technical section

Plasterer continued s d

Class B in loads of 4 tons
to 5 tons 19 cwt. T
Browning 160 9
Fibred browning 163 9
Board finish 160 9

⅜ in. plaster lath, over
600 yds. YS 2 5

⅜ in. × 6 in. × 6 in. cream
glazed wall tiles YS 27 2

Measured rates

Metal lathing

No. 24 gauge expanded metal
lathing and fixing YS

To softwood soffits **6 9**
4 4

To metal ***7 6**
4 4

Lime plaster

Render float and set on brick
walls and partitions YS ***7 2**
2 4

R.F. and S. on concrete
including hacking YS ***8 10**
2 4

R.F. and S. on expanded
metal lathing YS ***7 3**
2 5

Gypsum plaster

Render in cement-lime-sand
(1 : 1 : 6) and set in gypsum
plaster on brick walls and
partitions YS ***5 8**
1 11

Render in gypsum fibred
browning-sand (1 : 1½) and
set in gypsum on concrete
soffits including bonding
coat YS ***9 1**
3 6

Render and set on expanded
metal lathing including
pricking up coat YS ***8 8**
3 10

Plaster board

⅜-in. gypsum plaster lath
fixed to softwood soffits
finished to receive plaster YS ***4 10**
2 11½

Gypsum board finish setting
coat on last YS ***4 2**
1 1

Plain face

½-in. Portland cement and
sand (1 : 3) plain face
trowelled smooth on brick
walls YS ***6 6**
1 11

Tyrolean rendering

Render in cement, lime sand
(1 : 1 : 6) and finishing with
three coats patent coloured mix
preparations applied with
hand operated machine YS ***9 11**
2 5

s d

Sprayed " Limpet " asbestos
Approximate prices for sprayed
" Limpet " asbestos on the
following surfaces to the
thickness shown for
quantities of 1,000 yds. super.
Normal pressed finish.
New concrete soffits and
beams YS
½-in. **14 5**
¾-in. **19 8**
1-in. **21 9**

New structural steelwork
YS
½-in. **16 6**
¾-in. **21 9**
1-in. **23 10**
Extra over the above prices
for coloured texture finish
YS **3 3**

Wall tiling

6 in. × 6 in. × ⅜ in. standard
quality white glazed wall
tiles set and jointed on
prepared screed YS **49 4**

Egg shell matt or glossy
glazed enamelled tiles YS **60 11**

EXTERNAL PLUMBER

Market prices

Sheet lead, 3½ lb. and
upwards, in quantities of
5 cwt. to 1 ton C*110 0

Copper sheeting, 23 gauge,
in 1-ton lots C*260 0

Zinc sheeting, 14 gauge, in
1-ton lots C *98 0

Aluminium sheeting 20 SWG C
Super purity*504 0
Commercial quality 336 0

Cast iron rainwater and
soil goods

Medium weight pipe to
B.S. 416 and B.S. 460 in
6 ft. lengths No.
2½-in. 18 10
3-in. 21 0
4-in. 26 10
Half round gutter in 6 ft.
lengths No.
3½-in. 7 11½
4-in. 10 4
6-in. 16 11
The above are Standard-List
prices plus 22½%.

Measured rates

Milled sheet lead C
Flat roofs***190 9**
Gutters and flashings***190 9**

24 SWG copper sheet FS
Flat roofs ***5 2**
Gutters and flashings ***5 2**

23 SWG copper sheet FS
Flat roofs ***5 6**
Gutters and flashings ***5 6**

14 gauge zinc FS
Flat roofs ***3 3**
Gutters and flashings ***3 3**

20 SWG super purity
aluminium FS
Flat roofs ***5 1**

s d

Gutters and flashings ***5 1**

20 SWG commercial quality
aluminium FS
Flat roofs **4 2½**
Gutters and flashings **4 2½**

Rainwater gutters and pipes

⅛-in. cast iron half round eaves
gutter jointed and fixed to
fascia with brackets FR
4-in. **3 5½**
2 3
6-in. **5 1**
3 7½

18 gauge pressed steel half
round eaves gutter FR
4-in. **3 1½**
1 11
6-in. ***4 2½**
2 8

Asbestos cement half round
eaves gutter FR
4-in. **2 10**
1 7
6-in. **4 1**
2 7

Aluminium half round
eaves gutter FR
4-in. ***3 11**
2 8

Cast iron medium section
rain water pipes jointed and
fixed to walls with pipe nails
FR
3-in. **5 10**
4 5
4-in. ***7 4**
5 8

Pressed steel FR
3-in. **4 5**
3 0
4-in. **6 3**
4 7½

Asbestos cement FR
3-in. ***3 9**
2 3
4-in. **4 9**
3 1

Aluminium FR
3-in. **5 2**
3 9
4-in. ***7 0**
5 4

Soil and ventilating pipes

Lead soil, waste and ventilating pipes (15 lb. per yd. for
3-in. and 19 lb. per yd. for
4-in. diameter) fixed to walls
with lead tacks FR
3-in. ***11 5**
8 4
4-in. ***15 11**
10 4

Cast iron soil, waste and
ventilating pipes with caulked
joints fixed to walls with pipe
nails FR
3-in. heavy **7 1**
5 2
4-in. heavy **8 8**
6 6

Asbestos cement soil and
ventilating pipe fixed to walls
with holder bats FR
3-in. ***3 10**
2 4
4-in. **4 10½**
3 2½

"...now it's

FORMICA

polythene piping!"

From the 1st January this year all De La Rue plastics products take the family name of FORMICA. In the case of the famous flexible no-corrosion, never-burst polythene piping, this change of name accompanies developments in the product itself. The new FORMICA polythene piping is, from every aspect, polythene piping of the highest quality in the world—the most dependable, the most convenient, the most scrupulously manufactured. How can you be sure your piping is FORMICA polythene? By the coloured protective wrapping which distinguishes the two grades, normal and heavy gauge . . . By its high degree of internal and external polish . . . By this clear marking down the length of the pipe: FORMICA BS 1972/1953 POLYTHENE.

Plastics piping of **FORMICA** *quality!*

FORMICA LTD. DEPT. P214, DE LA RUE HOUSE, REGENT STREET, LONDON W.1 FORMICA *is a registered trademark*

technical section

s d

INTERNAL PLUMBER

Market prices

Lead pipe in quantities of 5 cwt. to 1 ton C
BS 602 *112 3
BS 1085 *119 3

Polythene tubing, heavy gauge, in quantities of 500 to 999 ft. per 100 ft.
½-in. 112 6
¾-in. 152 0
1-in. 193 6

Steel tubes to B.S. 1387 class B galvanised FR
¾-in. 0 9
1-in. *1 1
1¼-in. *1 5
1½-in. *1 8

The above are Standard List prices less 37¾%.

Galvanised malleable fittings.
Bend No.
1-in. 2 9½
1¼-in. 4 2½
1½-in. 6 0
Tee No.
½-in. 1 0
¾-in. 1 4¾
1-in. 2 0
1¼-in. 2 9½
1½-in. 4 0

The above are Standard List prices less 23½%, less 6¼% plus 40%.

Copper tubes to B.S.659 FR
½-in. *0 9
¾-in. *1 0½
1-in. *1 7
1¼-in. *1 11

The above are calculated on a basic price of 1s. 7⅛d. per lb. plus C.T.A. extras.

Measured rates

Lead pipe to BS 602

Main supply and laying in trench (measured separately) at the following sizes and weights in lbs. FR
½-in. 7 *3 8
2 9
¾-in. 11 *5 5
4 3
1-in. 16 *7 8
6 3
1¼-in. 28 *12 11
10 9
1½-in. 35 *16 7
13 5

Main supply fixed to walls and ceilings FR
½-in. 7 *4 3
2 10
¾-in. 11 *6 1
4 4
1-in. 16 *8 5
6 4
1¼-in. 28 *13 8
10 10
1½-in. 35 *17 11
13 6

Distributing pipes fixed to walls and ceilings FR
½-in. 4 *3 1
1 8
¾-in. 5 *3 6
2 1
1-in. 7 *4 7
2 11
1¼-in. 9 *5 5
3 9
1½-in. 12 *7 1
5 0

s d

Flushing and warning pipes fixed to softwood FR
¾-in. 4 *3 6
1 7
1-in. 5 *4 3
1 11
1¼-in. 6 *5 5
2 5
1½-in. 7 *5 11
2 9

Waste pipes and fixing to softwood FR
1¼-in. 6 *5 5
2 6
1½-in. 7 *5 11
2 11

Joints to fittings No.
½-in. *5 11
1 5
¾-in. *6 10
2 2
1-in. *7 5
2 11
1¼-in. *8 2
3 8
1½-in. *8 11
4 4

Extra for:
Bend No.
1¼-in. 2 7
1½-in. 3 8

Branch joints No.
½-in. *7 8
1 5
¾-in. *8 9
2 2
1-in. *9 2
2 11
1¼-in. *10 11
3 8
1½-in. *12 6
4 4

Polythene tubing to B.S. 1972
Heavy gauge as supply pipe laid in trench (measured separately) FR
½-in. 1 8
1 4
¾-in. 2 1
1 9
1-in. 2 7½
2 3

Heavy gauge as supply or distributing pipe fixed to walls FR
½-in. 2 9
1 7
¾-in. *3 4
2 2
1-in. 3 11
2 9

Steel tubing to BS 1387

Class C with screwed red lead joints as supply pipe laid in trench (measured separately) FR
½-in. 2 8
10
¾-in. 3 1
1 0
1-in. 3 3
1 5
1¼-in. *3 9
1 10
1½-in. *4 11
2 2

s d

Class B tubing fixed to walls FR
½-in. 2 7
10
¾-in. *3 0
1 0
1-in. *3 2
1 3
1¼-in. *3 8
1 8
1½-in. *4 9
2 0

Extra for malleable iron:
Bend No.
1-in. 5 1
3 1
1¼-in. *7 3
4 6
1½-in. 9 4
6 7

Tee No.
½-in. 3 1
1 1
¾-in. 3 5
1 6½
1-in. 4 0
2 2
1¼-in. 5 6
3 1
1½-in. 6 10
4 5

Copper tube

Copper tube to BS 1386 as supply pipe laid in trench (measured separately) to the following size and gauges FR
½-in. 18 *1 9
1 2
¾-in. 17 *2 5
1 9
1-in. 16 *3 2
2 7
1¼-in. 16 *4 4
3 6
1½-in. 15 *5 6
4 8

Copper tube to BS 659 as distributing pipe fixed to walls FR
½-in. 19 *1 10
1 1
¾-in. 19 *2 3
1 6
1-in. 18 *2 10
2 2
1¼-in. 18 *3 7
2 8
1½-in. 18 *4 2
3 4

Extra for brass compression fittings joining copper to copper No.

Coupling ½-in. 5 10
3 3
¾-in. 6 8
4 0
1-in. *9 4
5 10
1¼-in. *12 0
7 7
1½-in. *16 5
11 0

Bend ½-in. 7 4
4 6
¾-in. *8 8
5 6

technical section

Internal plumber continued

	s	d
1-in.	*12	3
	8	*3*
1¼-in.	*15	6
	10	*6*
1½-in.	*25	2
	18	*11*
Tee ½-in.	9	6
	6	*1*
¾-in.	*10	11
	7	*0*
1-in.	*16	3
	11	*4*
1¼-in.	*22	9
	16	*5*
1½-in.	*34	9
	26	*5*

GLAZIER

Market prices

		s	d
Sheet glass cut to size	FS		
24 oz.			10⅜
32 oz.		1	4¾
¼-in. Polished plate glass, glazing quality in plates not exceeding:	FS		
2 ft. super		*4	3
5 ft. super		*5	3
45 ft. super		*6	3
100 ft. super		*6	9
Rolled plate glass	FS		
⅛-in. rolled plate			11¾
¼-in. Georgian wired		*6	0

Attention is drawn to reduction in certain glass prices offered by manufacturers for acceptance of specified minimum quantities of one size and substance delivered to one address at one time

Measured rates

Glazing to wood

		s	d
Ordinary quality sheet glass and glazing with putty in squares	FS		
24 oz. O.Q.		1	5
32 oz. O.Q.		2	0
⅛-in. rolled plate glass		1	6½
¼-in. rough cast glass		1	11
Prismatic glass		2	9
¼-in. wired glass		2	2½
¼-in. Georgian wired plate glass		8	4
¼-in. Polished plate glass (glazing quality) in plates 5 to 45 ft. super		8	7

Glazing to metal

Add to above rates 1d. per ft. super

Sundries

		s	d
Hacking out broken sheet glass	FS	1	3
Black ribbon velvet and bedding to edge of glass	FR		8

Double glazing

		s	d
Insulight units of two skins of glass with lead spacers and glazing with mastic or beads (supplied). In panels 15 to 20 ft. super	FS		
32 oz. sheet		*10	1
¼-in. polished plate		21	4

Patent glazing

		s	d
Patent glazing with rolled steel lead capped bars for 8-ft. spans and glazing with ¼-in. Georgian wired cast	FS	4	9
Aluminium alloy patent glazing	FS	5	3

PAINTER

Market prices

		s	d
Washable distemper	C.	120	0
Emulsion paint	Gal.	45	0
Hard gloss paint:	Gal.		
Undercoat		46	0
Finishing		48	0

Measured rates

On walls and ceilings YS

		s	d
Twice whiten plastered ceilings		1	4½
			3
Two coats distemper on plastered walls or ceilings		2	2½
		1	*0½*
Two coats distemper on fair-faced brick or concrete walls		2	8
		1	*3*
Two coats emulsion paint on walls or ceilings		*2	10
		1	*8*
Prepare, prime and apply one coat oil colour on plastered walls		3	9
		1	*9*
Add for each additional coat		*1	8½
			10

On metal

		s	d
Prepare, prime and apply one coat oil colour on general surfaces	YS		
Basis price		*3	6½
		1	*6*
Add for each additional coat		*1	8
			10
On metal casements	YS		
Basis price		*5	7
		1	*6*
Add for each additional coat		*2	6
			10
On bars, angles etc., not exceeding 6-in. girth	YR		
Basis price			*11½
			3
Add for each additional coat			5
			2
On small pipes	YR		
Basis price			*11½
			3
Add for each additional coat			5
			2
On large pipes	YR		
Basis price		*1	11
			6
Add for each additional coat			10
			3½
Prepare, prime and apply one coat heat-resisting paint on heating surfaces of radiators	YS		
Basis price		*4	3
		1	*5½*
Add for each additional coat		*1	11
			9

On wood

		s	d
Knot, prime, stop and apply one coat oil colour on general surfaces	YS		
Basis price		*3	11
		1	*7½*
Add for each additional coat		*1	8
			10
On work not exceeding 3-in. girth	YR		
Basis price			6
			1½
Add for each additional coat			2½
			1
For each additional 3-in. girth	YR		
Basis price			5½
			1½
Add for each additional coat			2½
			1

Stain and varnish

		s	d
Prepare, size, stain and twice varnish on general surfaces of woodwork	YS	*4	3½
		1	*8*
On work not exceeding 3-in. girth	YR		7
			1½
For each additional 3-in. girth	YR		6
			1½

Oiling and polishing

		s	d
Twice oiling general surfaces of hardwood with linseed oil	YS	1	4
			10½
On work not exceeding 3-in. girth	YR		2
			1
For each additional 3-in. girth	YR		1½
			1
Staining and wax polishing general surfaces of hardwood	FS	1	0½
Staining bodying-in and fully French polishing on general surfaces of hardwood	FS	2	7½

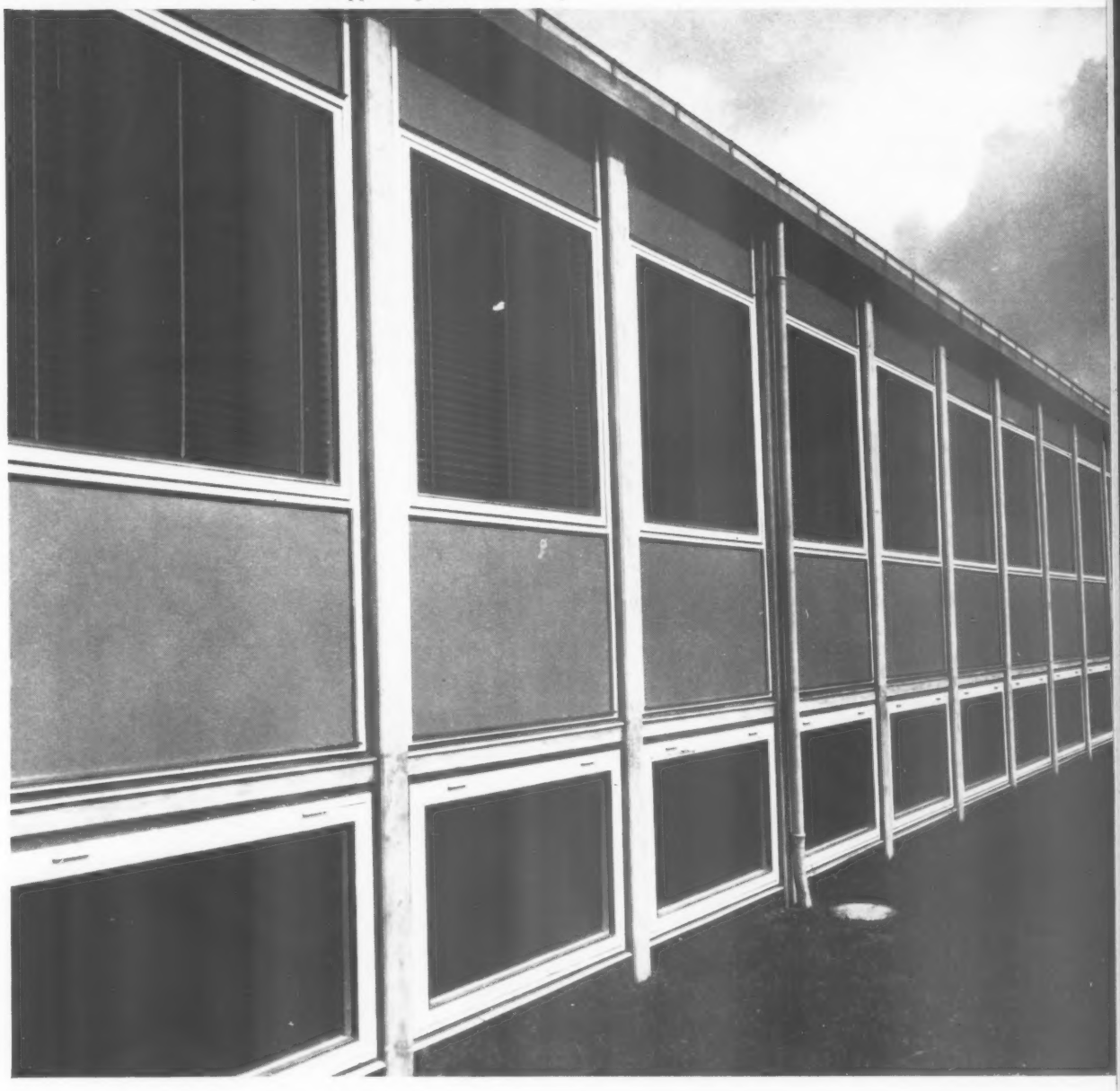
Papering

		s	d
Preparing and sizing walls and hanging plain lining paper	Piece	*10	7
		3	*3*
Hanging wall paper, p.c. 10s. per piece	Piece	*20	6
		12	*9*
Hanging border p.c. 1s. per yd.	YR	1	9
		1	*3*

working detail

WINDOWS: FACTORY IN COPENHAGEN

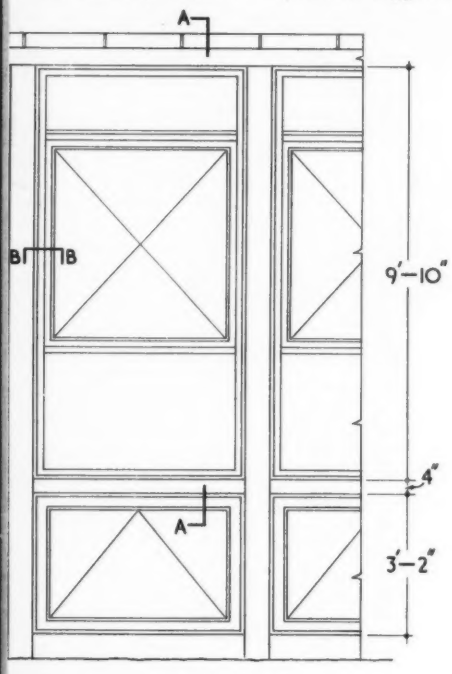
Preben Hansen, architect *(material supplied by M. G. Andrews)*



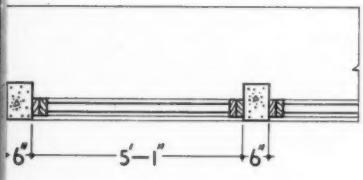
This detail is of particular interest in view of the demand for higher standards of insulation of factory buildings. Concrete stanchions are placed at relatively close centres with reinforced-concrete intermediate floor and roof (also heavily insulated) enclosing timber-framed infill panels. Note the neat gutter and downpipe detail and the skill with which timber framing and concrete structure have been assimilated to a single design.

WINDOWS: FACTORY IN COPENHAGEN

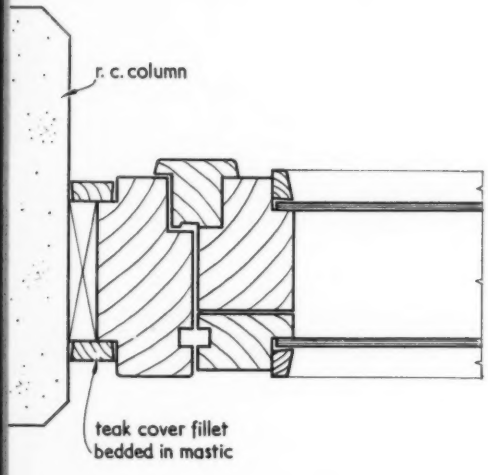
Preben Hansen, architect *(material supplied by M. G. Andrews)*



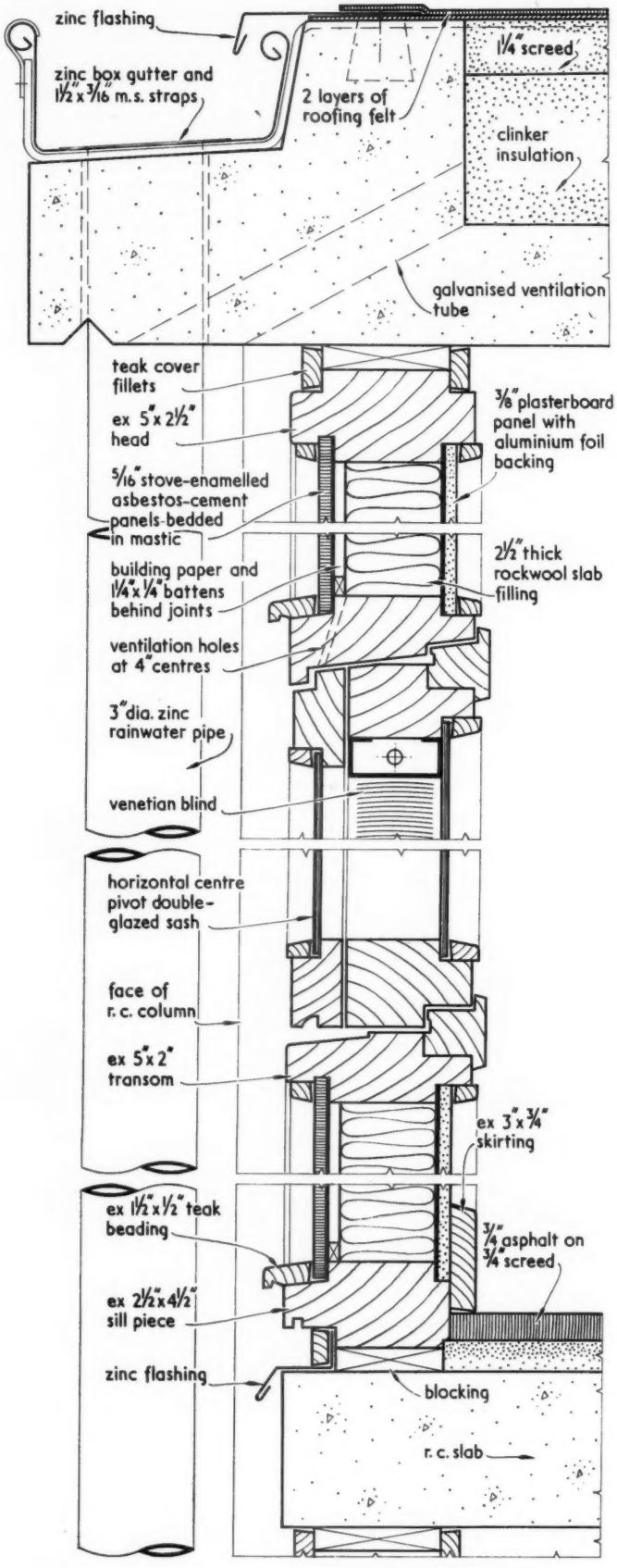
ELEVATION. scale ¼" = 1'—0"



PLAN. scale ¼" = 1'—0"



PLAN AT B—B. scale ¼ full size



SECTION A—A.

note: dimensions figured in feet and inches are approximate

working detail

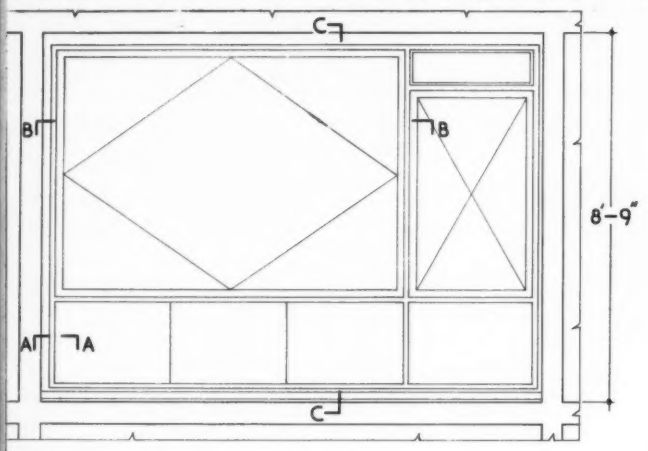
WINDOWS: FLATS AT ODENSE, DENMARK

Preben Hansen, architect (*material supplied by M. G. Andrews*)

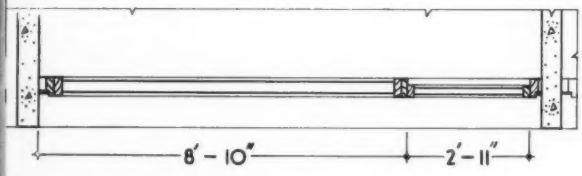
This is a good example of a highly-insulated timber-framed infill panel in a concrete cross-wall construction. Note the architect's consistent use of teak beads and cover moulds over panels and glazing alike, and the method used to ventilate the cavity behind the asbestos-cement facing panels.

WINDOWS: FLATS AT ODENSE, DENMARK

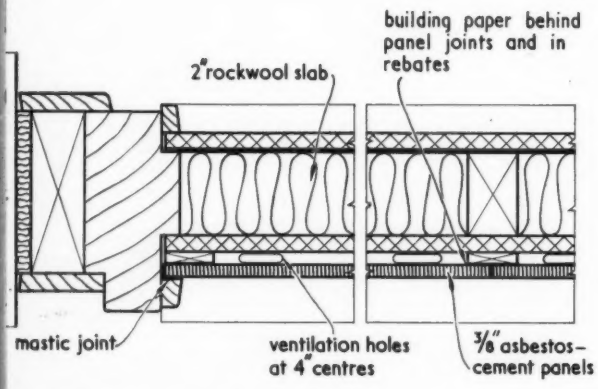
Preben Hansen, architect (*material supplied by M. G. Andrews*)



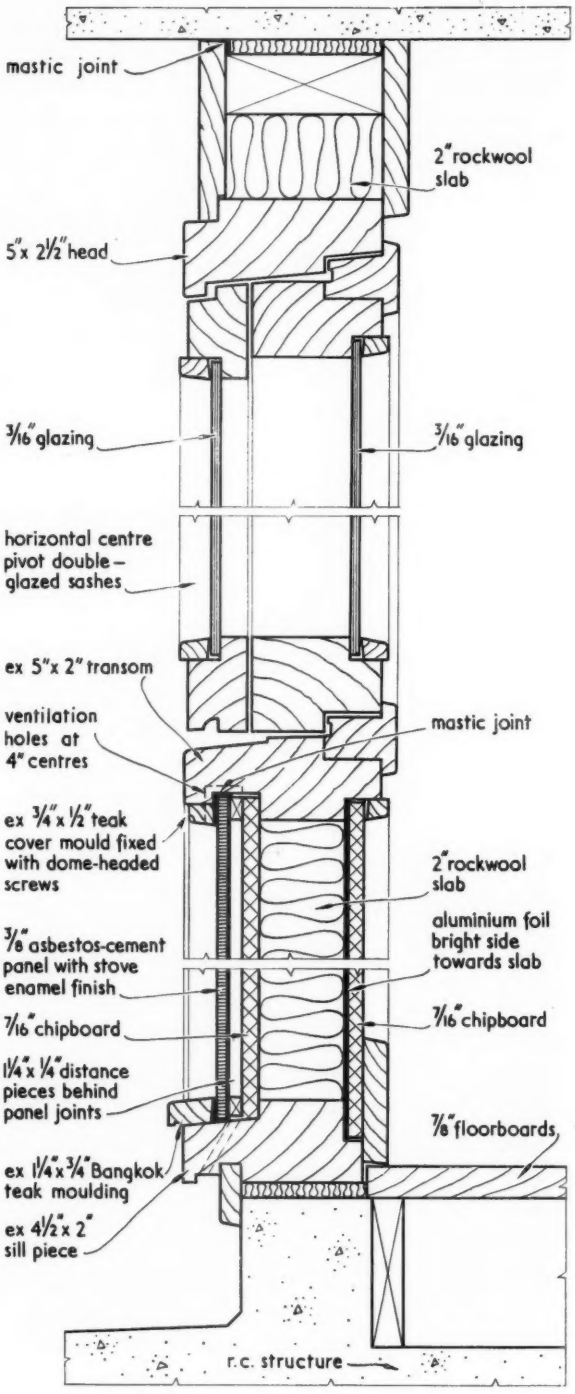
ELEVATION. scale 1/4" – 1'– 0"



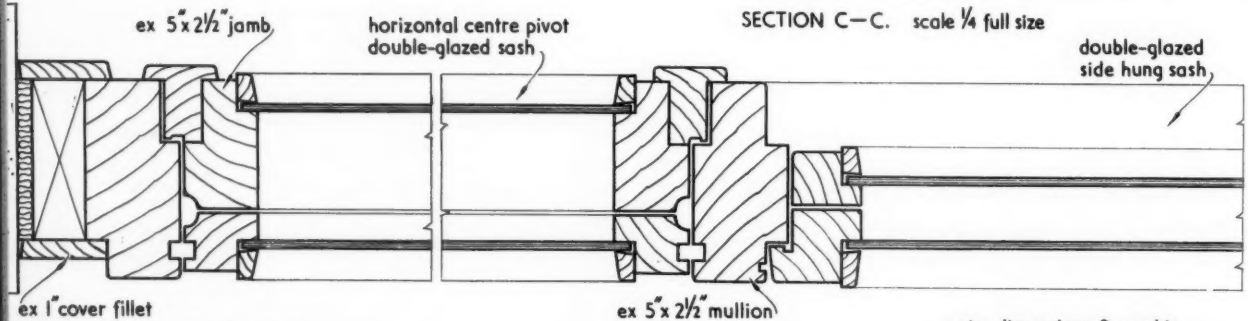
PLAN. scale 1/4" – 1'– 0"



PLAN AT A—A. scale 1/4 full size



SECTION C—C. scale 1/4 full size



PLAN AT B—B. scale 1/4" full size

note: dimensions figured in feet and inches are approximate

On this secondary staircase at the Marley London Showroom, Marley wall tiles, Marleyrail and Marley floor tiles all contribute to the harmonious effect which has been achieved. The skirting is covered with Marleyfilm.

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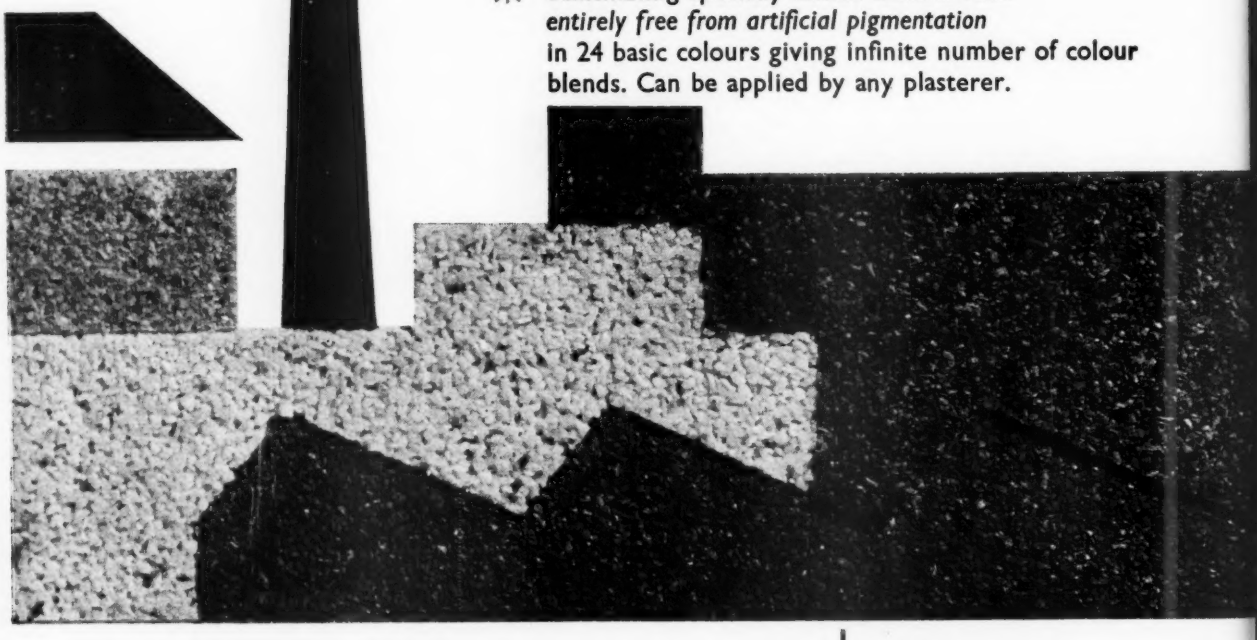

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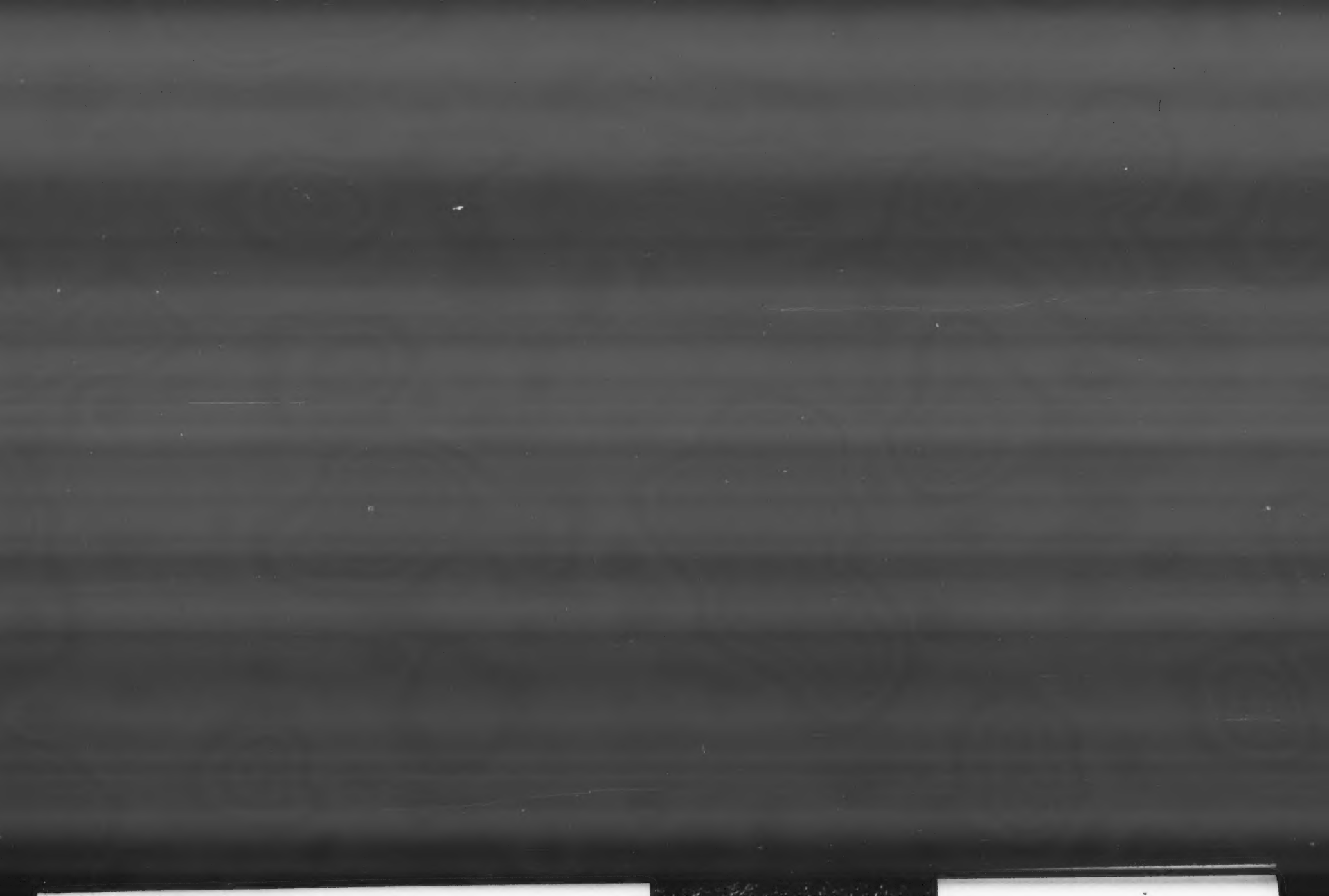
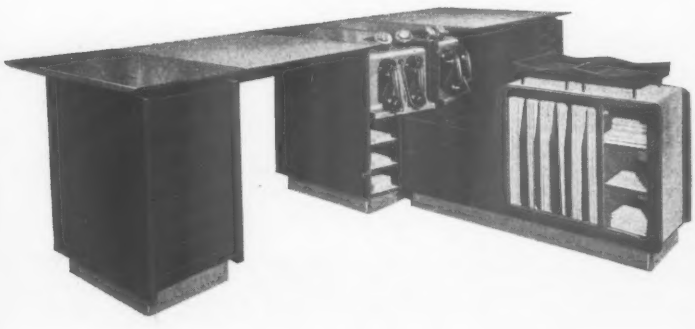


OFFICE EXTENSION IN HACKNEY

William Mallinson & Sons, Ltd., veneer and timber merchants, whose showrooms of veneers and plywood products are probably second to none, opened last week a new office block at their headquarters in Hackney Road, London. The architects were J. Douglas Matthews & Partners (assistant architect in charge: V. A. Nicholas). The building is r.c. framed. The firm's timbers and veneers were used for internal finishes, stairs, windows and doors. The cladding panels, developed in collaboration with the LCC, consist of mahogany veneer bonded to pressed-steel sheets and coated with a fire-resistant lacquer. The elevation shown left is at the rear of the building, but consists of the same elements as the main facade in Hackney Street. A brave attempt has been made to turn the small court into an attractive open space with planting and paving, but the clumsily-shaped raised pool is not successful.



Rotherwick House
In the new Bond Street headquarters of the Union Castle Steamship Co. the dual reception desks were specially built by Waring & Gillow to the designs of the architect Michael Egan, F.R.I.B.A.

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Announcements

PROFESSIONAL

Ralph Tubbs, O.B.E., F.R.I.B.A., has now moved his office to 46, Queen Anne Street, W.1 (telephone Welbeck 5212).

Peter Dunham, Widdup & Harrison, announce that their new London office telephone number will be Museum 2469.

Zygmunt J. Nowak, A.R.I.B.A., is now practising from 106, Park Street, London, W.1 (telephone: Mayfair 5968).

TRADE

Firth Cleveland Finance Ltd. is a new project of the Firth Cleveland Group. It will be concerned with financing Hire Purchase transactions for all sections of the motor trade (private cars, commercial vehicles, tractors, caravans, etc.), and industrial plant. The offices of the Company are at Firth Cleveland Group Headquarters at 8, Cleveland Row, S.W.1.

Maclean & Co. (Metal Windows) Ltd. has merged its interests with the window manufacturing business of Standard Metal Window Co. of West Bromwich and that as from April 1 the company's new name will be known as Standard Maclean Ltd.

Following discussions between the Ministry of Agriculture, Fisheries and Food and the Timber Development Association it has been agreed that plywood may be considered for use under the Farm Improvements Scheme. Guidance and information on the use and properties of plywood can be obtained from the Timber Development Association, 21, College Hill, E.C.4 (telephone City 4771).

F. G. Brewer, O.B.E., who has been Secretary to the Gas Council since 1948, will retire from that office at the end of September. His successor will be the Chief Accountant of the Council, W. Bailey, F.S.A.A., F.I.M.T.A.

Following the voluntary retirement of L. J. Fairhurst, British Insulated Callender's Cables, Limited, announce the appointment of T. P. Rome, D.F.H., A.M.I.E.E. as his successor, to the position of Liverpool branch manager, with effect from March 1.

F. Hills & Sons, Limited, have promoted H. Austin Wood to the position of London Branch Manager after representing the Company in their Northern area for the last four years. The Cuffley Office and Depot, which is a new venture to ensure delivery service of Hills Doors in the south, will be entrusted to Mr. Wood. The address of Hills new office is: Sopers Road, Cuffley, Herts (telephone: Cuffley 2824/5). T. Dawson will now represent Hills in the Northern Area.

Hampton & Sons Ltd. have regrouped their Contracts Division which has now become a subsidiary company under the name of Hamptons Contracts Ltd., with West End sales offices and studios at 45-47, Mount Street, Park Lane, W.1 (telephone: Grosvenor 2371-5). The company will formally operate under its new name from May 1.

R. J. Masterson (Overseas Division), Expandite Ltd. leaves on March 12 to take up appointment as Manager, Central African Division. His address will be: c/o P.O. Box 394, Salisbury, Rhodesia.

Phillips Electrical Ltd. have appointed R. J. Flitt as representative of the Lighting Division for South Staffordshire.

The Thermatic Heating Co. Ltd. has now moved its offices to South Croydon, Surrey (telephone: Croydon 9258/9, 9250).

S. Thomson, Director and General Manager (Sales) of Ideal Boilers & Radiators Ltd., is retiring at the end of this month, and F. L. Shaw, who has been with the Company for many years has been appointed General Manager (Sales). Mr. Thomson is also relinquishing his position as Chairman of the Cast Iron Heating Boiler & Radiator Manufacturers' Association and his Directorship of the British Bath Manufacturers' Association, but will retain his seat on the Board of Ideal Boilers & Radiators Ltd.

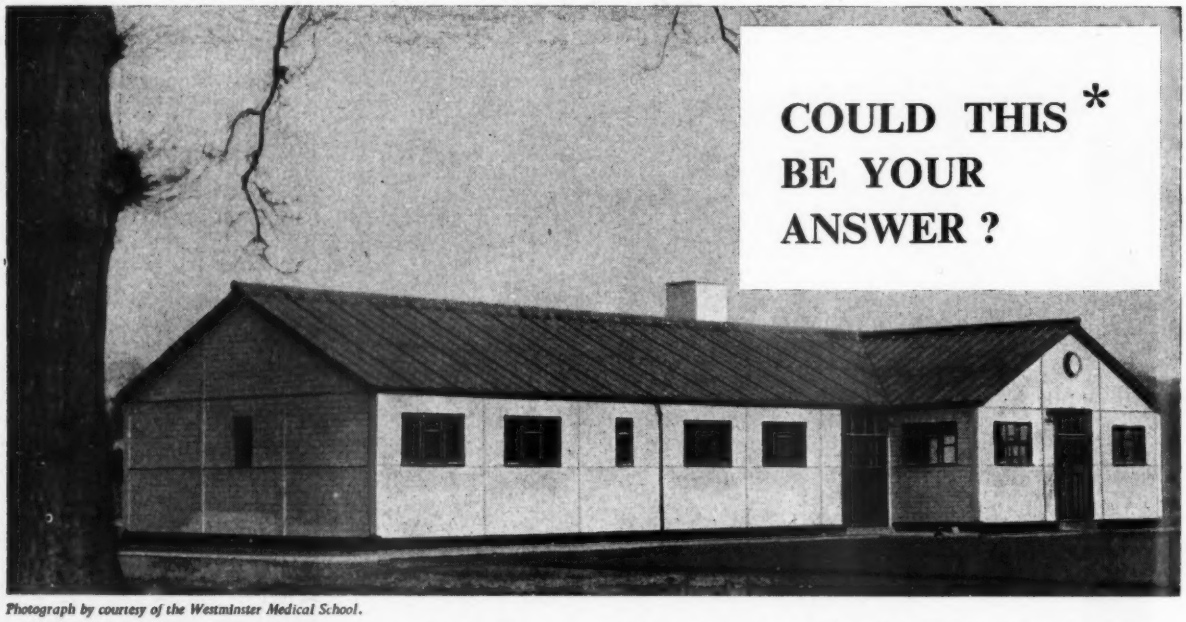
Watts Automatic Boilers have formed a new company to take over the manufacture and sale of Watts Oil Burners, Watts Oil Fired and Gravity Feed Boilers.

British Paints Limited announce that they have been awarded the Royal Warrant.

The new offices of Associated Lead have now been completed and, as from the middle of March, all the various departments of the company previously housed at Finsbury Circus and Ibex House will be re-housed together at Clements House, 14-18, Gresham Street, E.C.2 (telephone: Monarch 4400). Associated Lead Manufacturers Export Co. Ltd. also moves to Clements House at the same time.

Correction

The artist who designed the sgraffito mural at Fison's Research Centre (AJ, March 3, page 363) is John Hutton, and not John Sutton.



Photograph by courtesy of the Westminster Medical School.

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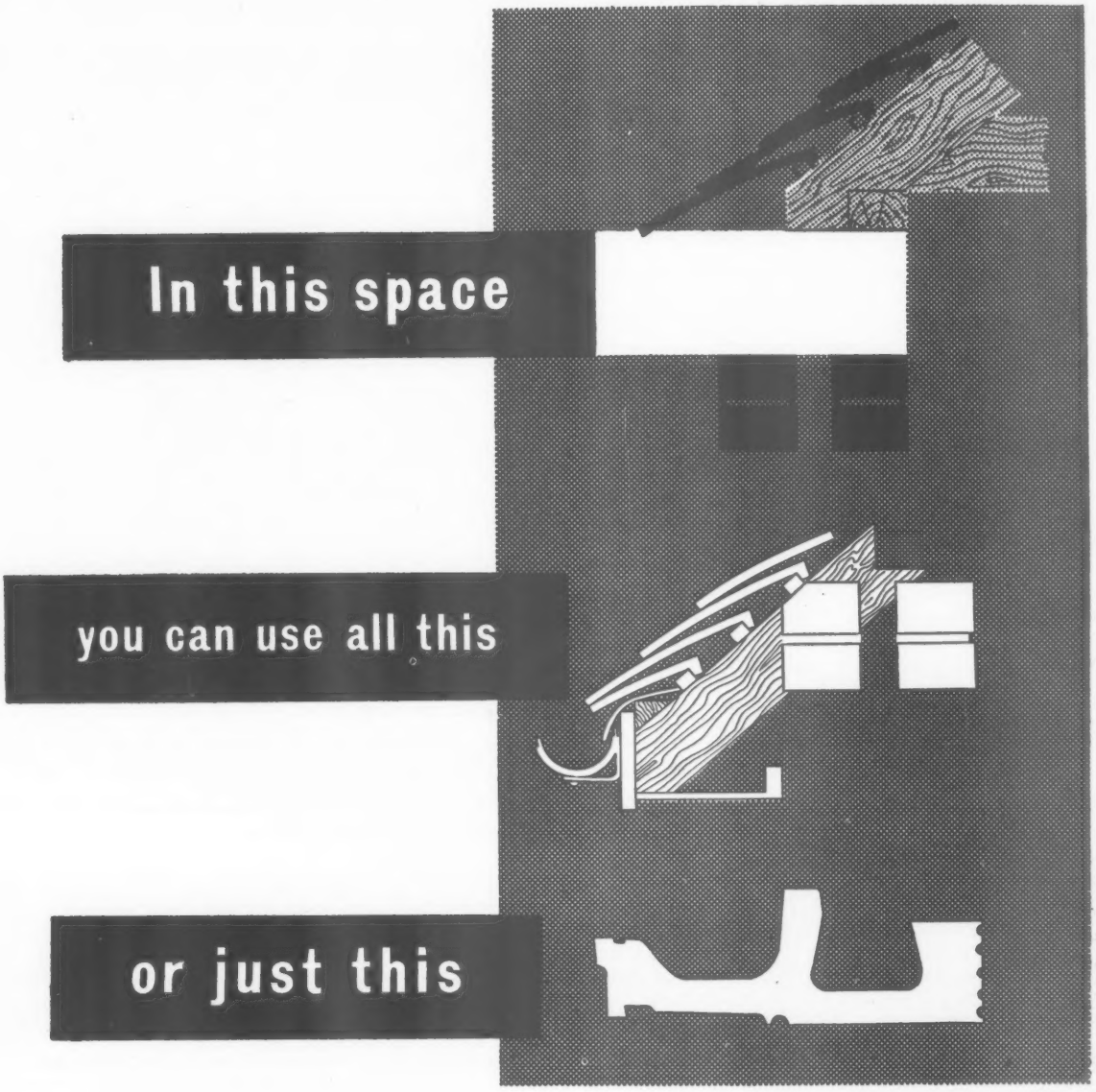

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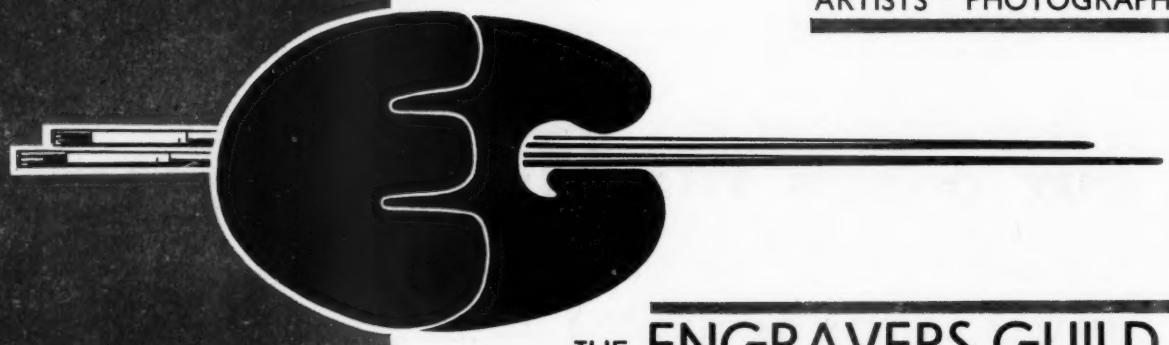

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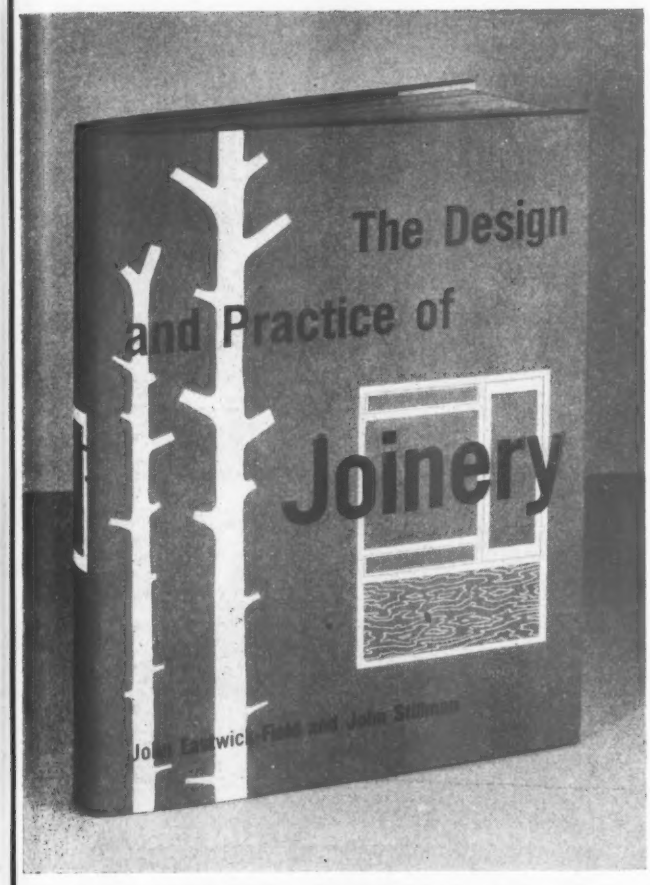

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THIS, THE ONLY AUTHORITATIVE, UP-TO-DATE BOOK about present-day joinery practice, is published at the recommendation of the Text and Reference Books Committee of the Royal Institute of British Architects and is intended primarily for architects, assistants and students of architecture. But, because its scope is broad and because it is concerned with the basic principles of design and practice, it will also be of great interest and value to all who are engaged in the handling and conversion of timber, including joinery manufacturers, joiners, cabinet makers, carpenters, shop fitters and other woodworkers.

The text includes chapters on the timber yard; moisture movement in timber; an analysis of construction; the design and machining of sections; and of joints; specification and practice. Among its useful appendixes are a selection of timbers suitable for joinery, set out in tabular form, a complete list of British Standard Specifications and Codes of Practice applicable to joinery, and a general bibliography. It is comprehensively illustrated: there are nearly 90 photographs and over 200 specially drawn line illustrations—more than 80 in the chapter on joints. And there is a good index.

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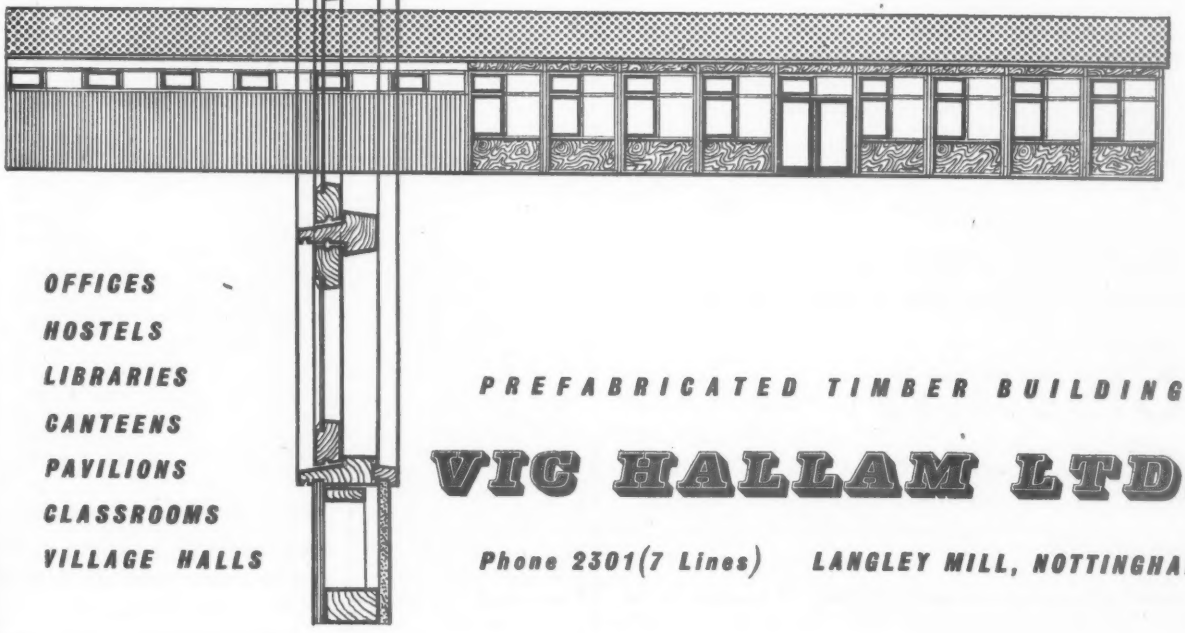

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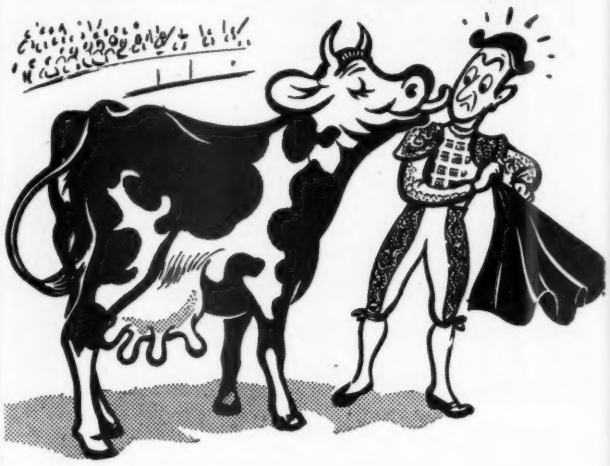

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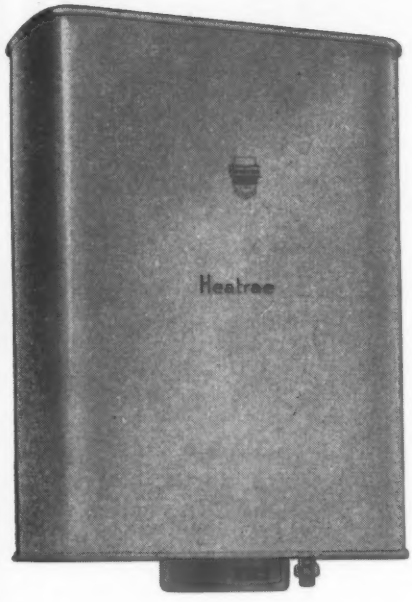

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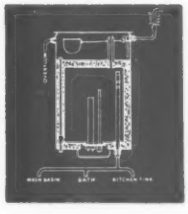

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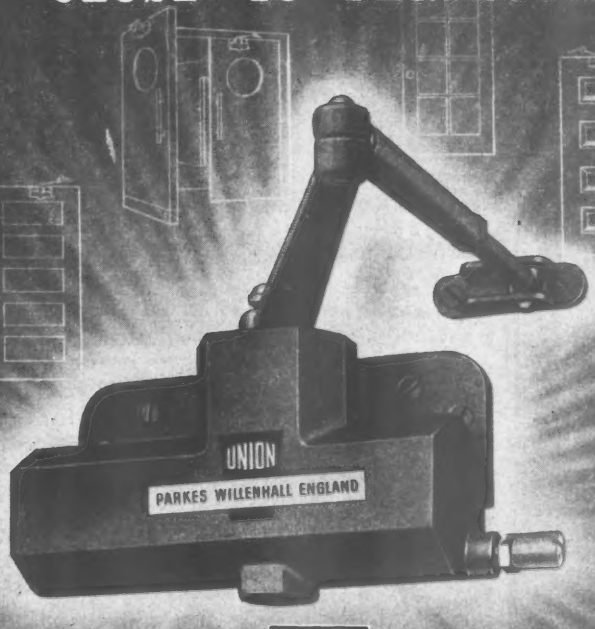

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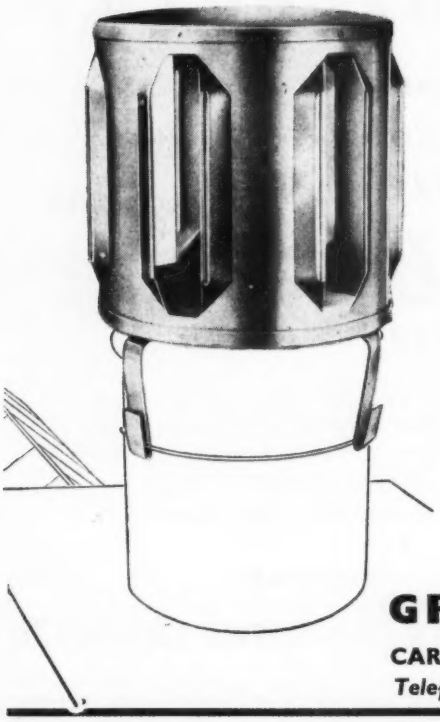

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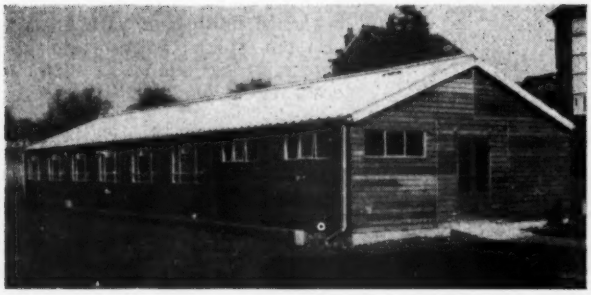

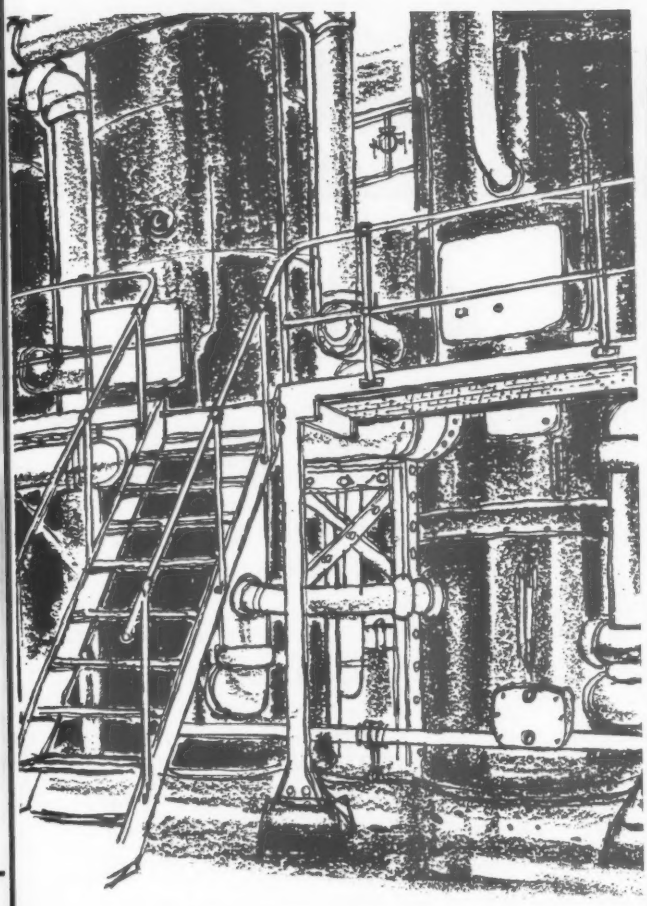

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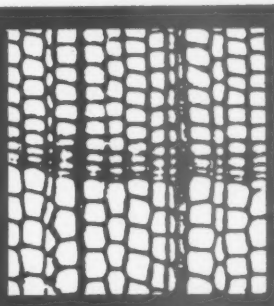

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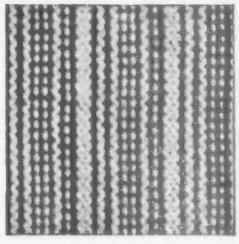

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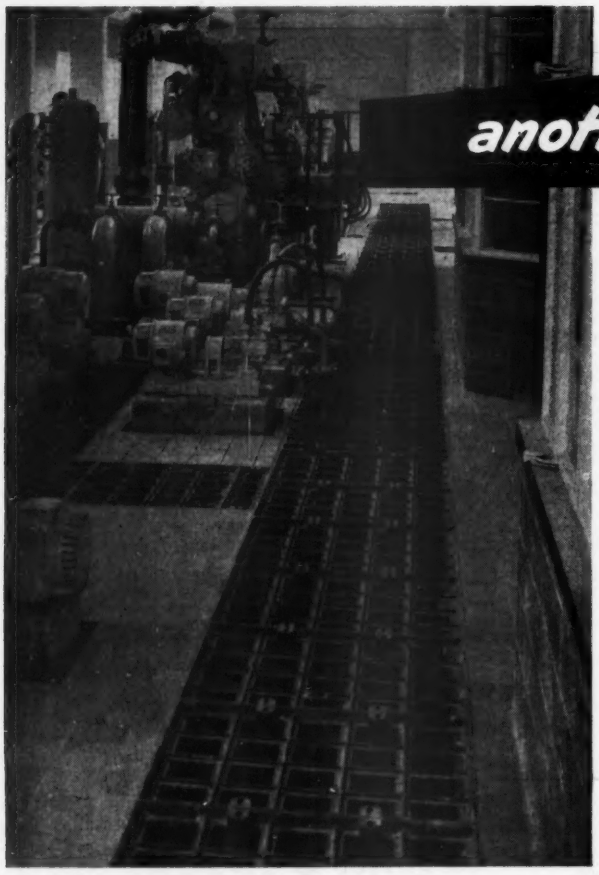

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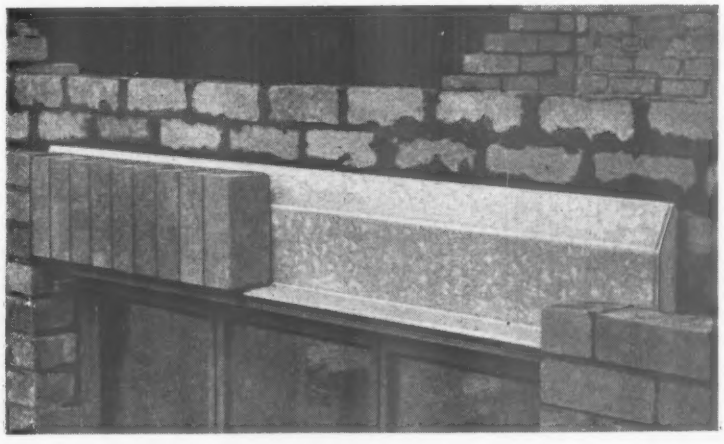

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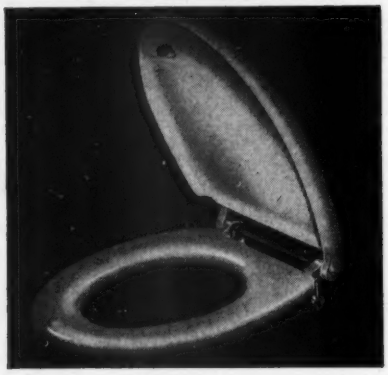

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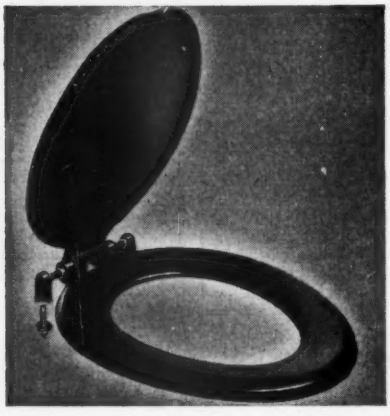

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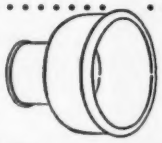

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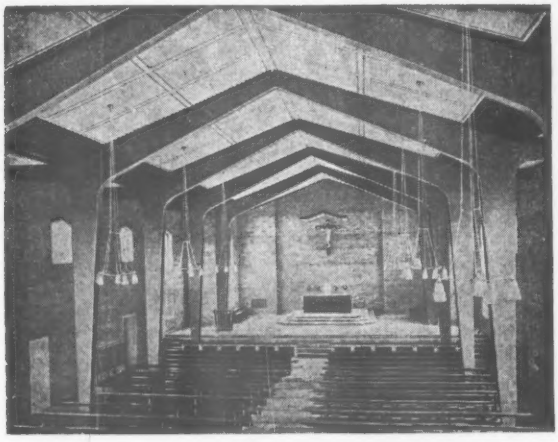

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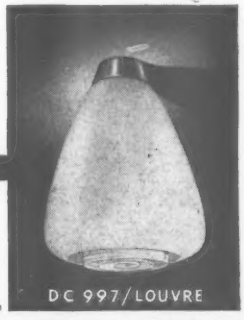

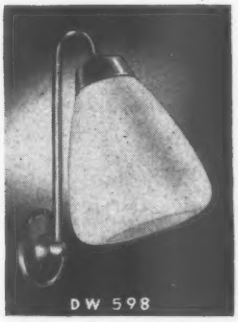

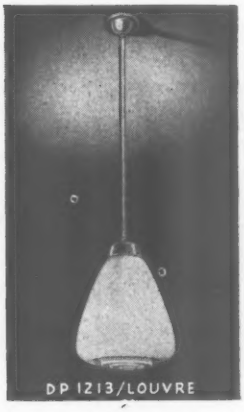

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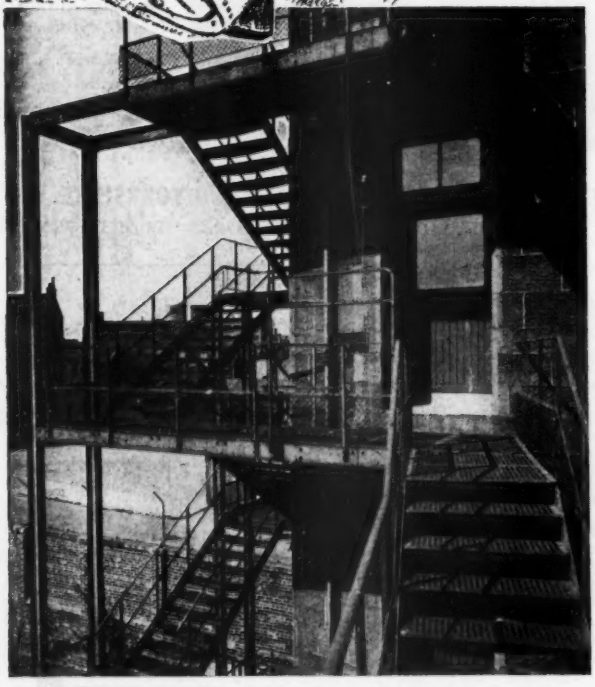

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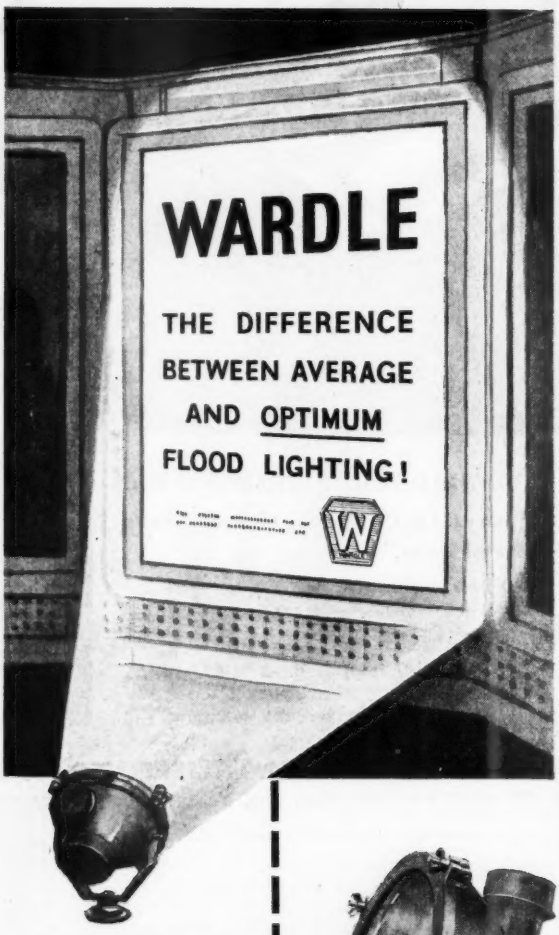

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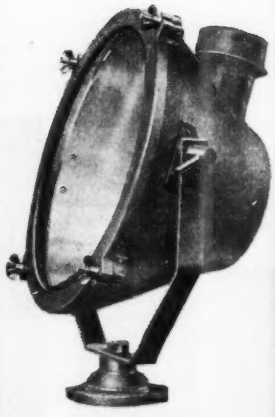

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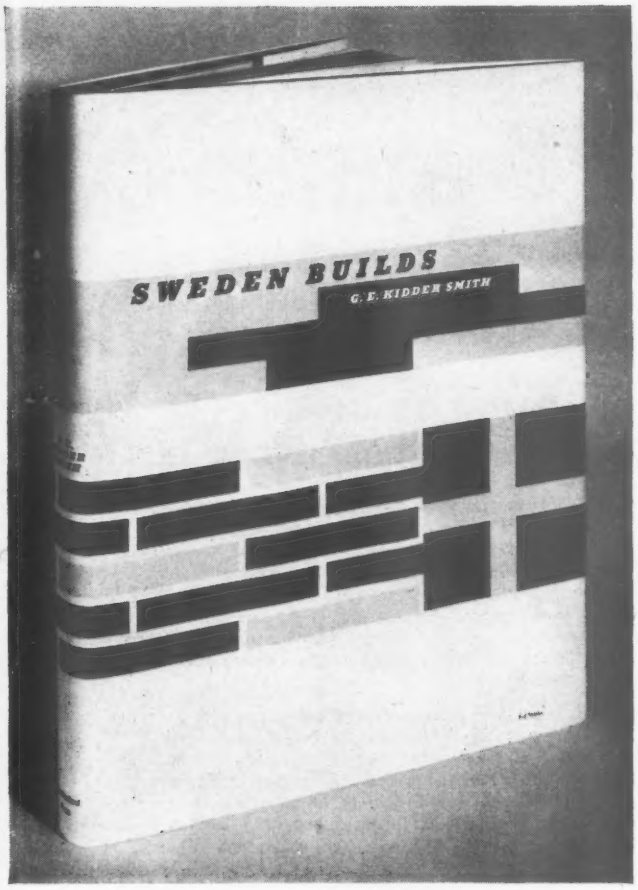

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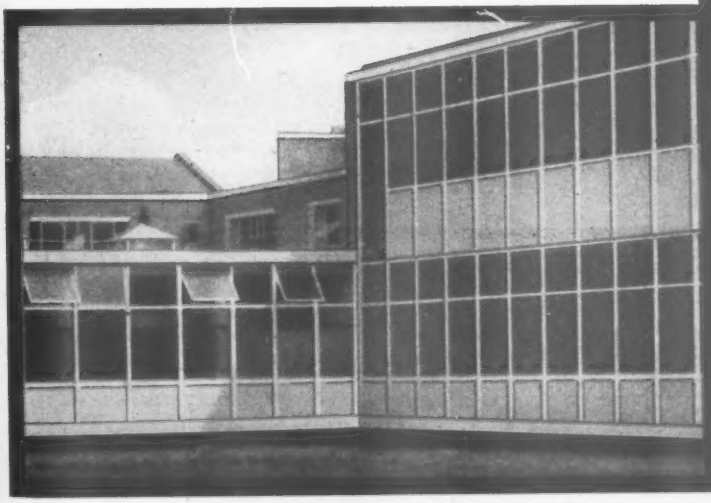

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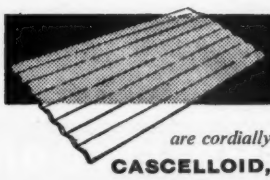

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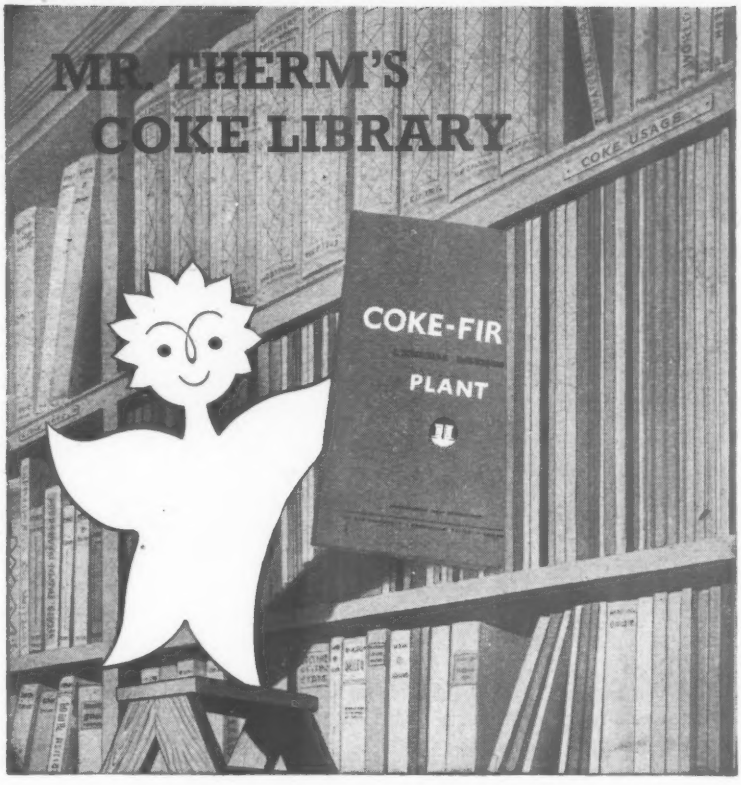

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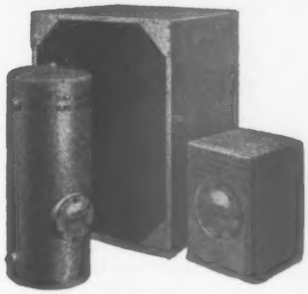

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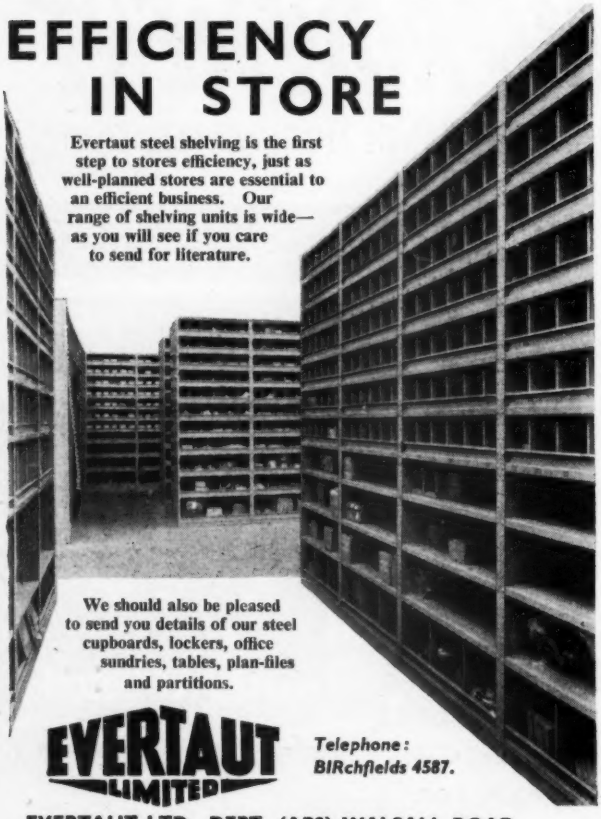

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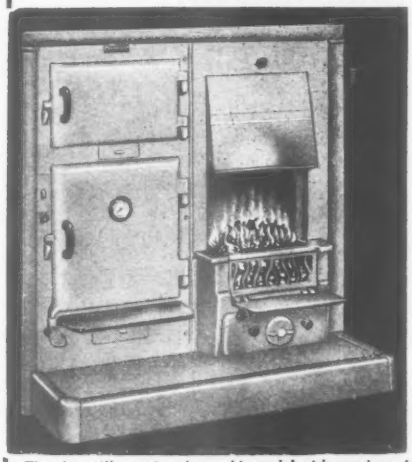

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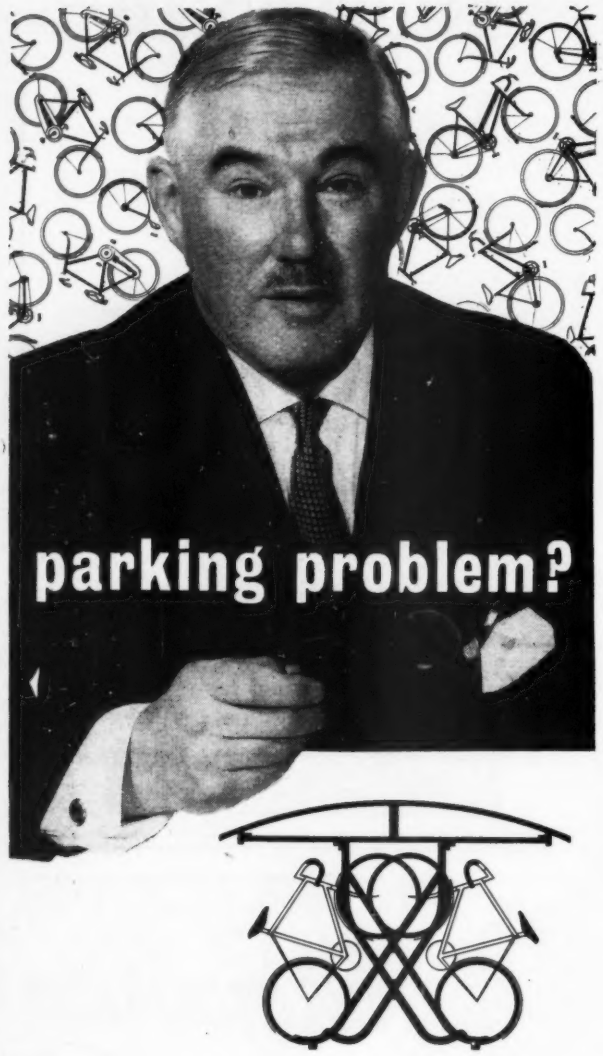

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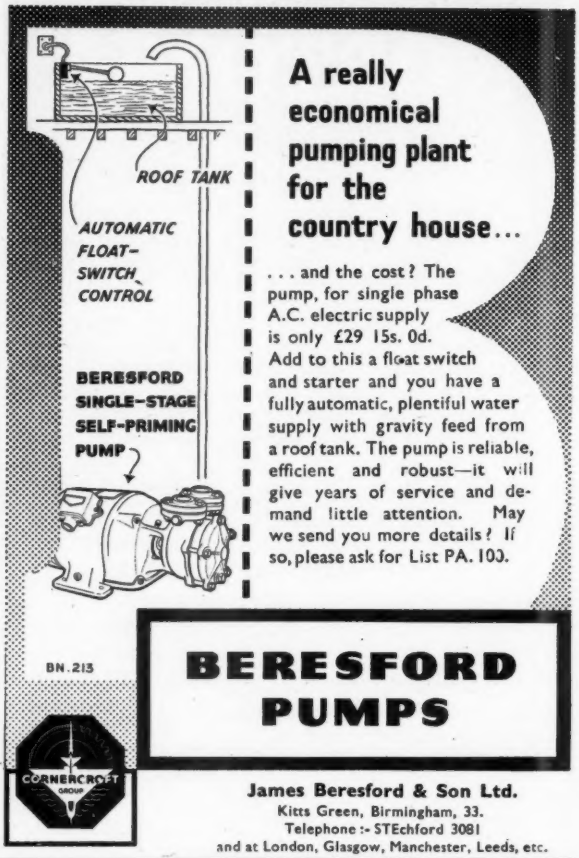

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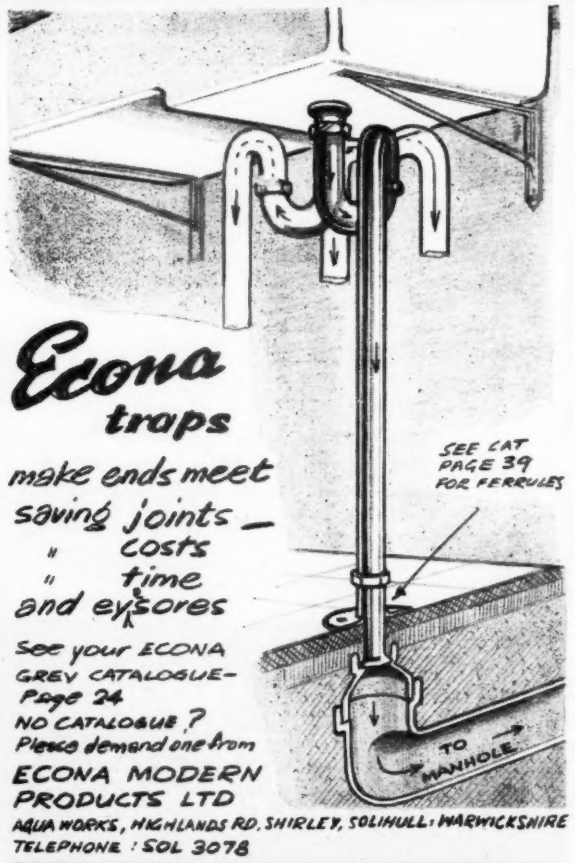

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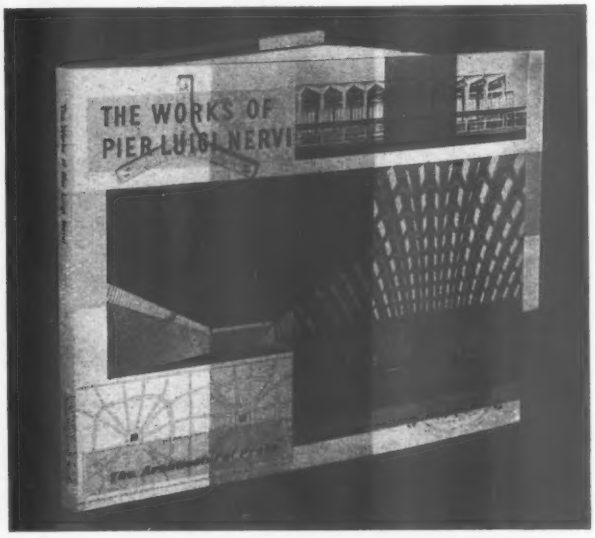

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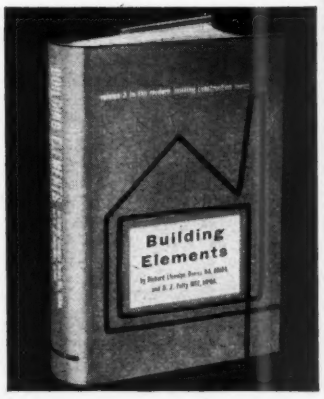

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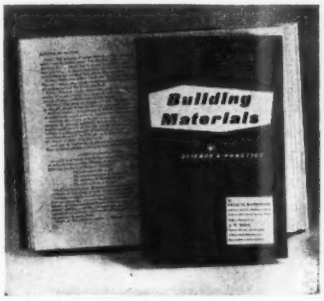

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Size: 8¼ in. by 5⅛ in. Containing 336 pages including 58 diagrams and halftone illustrations. Second edition, 30s. net, postage 1s. 5d.

structure in building

by W. FISHER CASSIE, PH.D., M.S., F.R.S.E., M.I.C.E., M.I.STRUCT.E., and J. H. NAPPER, M.A., F.R.I.B.A., A.M.T.P.I. Foreword by W. A. ALLEN, B.ARCH., A.R.I.B.A.

Steel, concrete, aluminium alloys, etc., have revolutionised structural design, and although this field is largely an engineering one, today it is essential for the architect to understand something about it. No attempt is made in the book to give the formulae and methods of analysis and design used by the structural engineer; rather it provides the architect and student with mental pictures of how structures behave, for without the ability to 'feel' how forces act and react in the support of buildings, the architect cannot hope to put into practice the spatial conceptions of present-day architecture.

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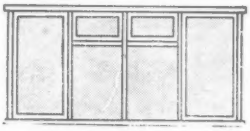

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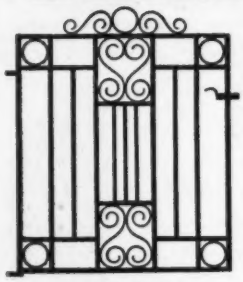

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Replies to Box Numbers should be addresser' care of "The Architects' Journal," at the address given above.

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(1) STRUCTURAL DRAUGHTSMEN. Draughtsmen experienced in detailing and preparing working drawings for structural steelwork and reinforced concrete, mainly steel industrial buildings, with an ability to make simple structural calculations and prepare quantities. Some knowledge of timber structures also would be an advantage.

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APPLICANTS MUST BE RESIDENT IN THE UNITED KINGDOM OR EIRE, AND MUST BE EXEMPT FROM OR HAVE FULFILLED THEIR NATIONAL SERVICE OBLIGATIONS.

Commencing salaries will be according to age, qualifications and experience. Passages to New Zealand, including families, will be given to the successful applicants and financial assistance provided towards the cost of transport of personal effects.

Enquiries mentioning this paper and quoting reference B11/20/4, also stating the type of position sought, should be addressed to The High Commissioner for New Zealand, 415, Strand, London, W.C.2. General information on the conditions of employment in the New Zealand Railways Department, together with application forms, will then be furnished.

Completed application forms must be lodged in London not later than 30th April, 1958. 9053

GOVERNMENT OF MAURITIUS
ARCHITECT—ARCHITECTURAL DEPARTMENT

To design and supervise the erection of buildings and administer building contracts.

Contract appointment. Salary range £927 to £1,665 p.a. Gratuity of £50 for each completed three months of service. Free passages for officer, wife and children, not exceeding five persons in all. Generous home leave. Low income tax.

Candidates must be A.R.I.B.A.

Write Director of Recruitment, Colonial Office, London, S.W.1, giving briefly age, qualifications and experience, quoting BCD 112/52/02. 9051

THE UNIVERSITY OF MANCHESTER

Applications are invited for the post of LECTURER IN ARCHITECTURE from candidates with professional membership of the Royal Institute of British Architects, and not less than three years of practical experience. Salary on a scale from £900 to £1,650 per annum; initial salary according to qualifications and experience. Membership of the F.S.S.U. and Children's Allowance Scheme. Applications should be sent not later than 26th April, 1958, to the Registrar, the University, Manchester, 13, from whom further particulars and forms of application may be obtained. 9055

LINDSEY COUNTY COUNCIL
PLANNING DEPARTMENT

Applications are invited for the following appointments:—

(*a*) SENIOR PLANNING ASSISTANT. Special Grade £750—£1,030 per annum. Applicants must have passed Final examination of T.P.I. or be University graduates and have had in addition to training at least two years experience in a county planning department. Preference to candidates with experience in survey and research. Car allowance.

(*b*) TWO ASSISTANTS. A.P.T. Grade I, £575—£725 per annum—in one case a car allowance may be available if required. Applicants must have completed a three-year period of training in a planning, architect's or surveyor's office comparable with the recognised scheme for the training of Municipal Engineers or have passed the Intermediate examination of T.P.I. or R.I.C.S.

Commencing salary in both cases will have regard to qualifications and experience. Superannuation and N.J.C. conditions of service as approved by the County Council. Canvassing will disqualify. Relationship to any member or senior officer of the Council to be disclosed in writing by applicants.

Applications with particulars of training, experience and names of two referees to County Planning Officer, The Castle, Lincoln, not later than 3rd April, 1958. 9000

BOROUGH OF HARROW

Applications are invited for the undermentioned post in the Borough Engineer's Department:—

CLERK OF WORKS (Building Maintenance), A.P.T. Grade II, Salary £725—£845 per annum, plus London weighting.

Applicants must have a sound technical experience in building trade subjects, have prepared tender documents and supervised repairs and renovations by contract.

The appointment will be subject to the Local Government Superannuation Acts, the National Scheme of Conditions of Service, and the passing of a medical examination.

The Council cannot offer housing accommodation.

Forms of application may be obtained from me, to whom they should be returned, not later than Tuesday, 8th April, 1958.

DAVID PRITCHARD,
Town Clerk.

Town Clerk's Department,
Harrow Weald Lodge,
Harrow, Middx. 9023

EBBW VALE URBAN DISTRICT COUNCIL
ARCHITECT'S DEPARTMENT
APPOINTMENT OF ARCHITECTURAL ASSISTANT
Grade A.P.T. II (£725—£845)

Applications are invited for the above appointment which is superannuable and subject to medical examination.

Applicants to be Intermediate R.I.B.A. or Intermediate R.I.C.S.

Housing accommodation will be made available. Form of Application from the Clerk of the Council, Council Offices, The Walk, Ebbw Vale, Mon., to be submitted by 31st March, 1958.

HOWARD J. WILLIAMS,
Clerk of the Council. 8986

CUMBERLAND COUNTY COUNCIL
COUNTY ARCHITECT'S DEPARTMENT

ASSISTANT QUANTITY SURVEYOR required. Salary in accordance with Special Grade (£750 × £40—£1,030). N.J.C. Service conditions. Post pensionable and subject to medical examination.

Applicants should be suitably qualified (A.R.I.C.S.), and experienced in estimating, taking off, billing, measurement of work, and settlement of accounts.

Applications, on forms obtainable from John H. Haughan, F.R.I.B.A., County Architect, 15 Portland Square, Carlisle, to be received by him not later than Saturday, 19th April, 1958.

G. N. C. SWIFT,
Clerk of the County Council. 9022

PETERLEE DEVELOPMENT CORPORATION
CHIEF ARCHITECT'S DEPARTMENT

Applications are invited for the following appointments:—

(*a*) ARCHITECTURAL ASSISTANT. Salary Grade III (£656—£784).

Applicants for appointment should have passed the Intermediate Examination of the R.I.B.A. or up to that standard, and should have a general experience in architectural work.

(*b*) JUNIOR QUANTITY SURVEYOR. Salary Grade IV (£728—£907).

Applicants should be up to the standard of the Intermediate Examination of the Royal Institution of Chartered Surveyors, and be capable of abstracting and billing, site measuring and taking off under supervision.

The appointments, which are superannuable, are subject to the Corporation's Conditions of Service and will be terminable by one month's notice on either side. The successful applicants will be required to pass a medical examination.

Housing accommodation will be available if necessary.

Applications, stating age, education, experience and qualifications, and giving the names of two persons to whom reference can be made, should reach the undersigned not later than Wednesday, 9th April, 1958.

A. V. WILLIAMS,
General Manager.

Shotton Hall, Old Shotton,
Peterlee, Horden, Co. Durham. 9052

AIR MINISTRY WORKS Design Branch require in London and Provinces ARCHITECTURAL ASSISTANTS, experienced in planning/preparation of working drawings and details for permanent and semi-permanent buildings. Salaries in London up to £1,015 per annum for men and £952 per annum for women. Somewhat lower in provinces. Starting pay dependent on age, qualifications and experience. Long term possibilities with pensionable and promotion prospects. 5-day week, 3 weeks 3 days leave a year. Liability for overseas service. Normally natural born British subjects. Write, stating age, qualifications, employment details, including type of work done, to any Employment Exchange, quoting Order No. Borough 100. 8582

MIDDLESEX COUNTY COUNCIL—COUNTY ARCHITECT'S DEPT.

ASSISTANT ARCHITECTS, A.P.T. V (£1,175—£1,325 p.a.) and A.P.T. IV (£1,025—£1,175 p.a.). Both posts plus London weighting. Established and pensionable, subject to medical assessment and prescribed conditions. Should be Registered Architects and have had extensive experience in design and supervision of building contracts. Application forms from County Architect, 1, Queen Anne's Gate Buildings, Dartmouth Street, S.W.1, returnable by 17th April (quote X.135 AJ). Canvassing disqualifies. 9050

ASSISTANT ESTIMATOR
THE REED PAPER GROUP

have a vacancy in their Civil Engineering Department at Aylesford, Kent, for a young man aged 25/35. He must have had at least 3 years' experience in a Building Contractor's or Surveyor's Office and be fully conversant with the preparation of estimates for building and Civil Engineering projects, and to be able to carry out all phases of working up in the preparation of accurate Bills of Quantities.

The post is permanent and the work varied and interesting with a good salary and excellent conditions of service, including non-contributory pension and house purchase schemes.

Apply with full particulars to the Personnel Officer, Group Personnel Division, Albert E. Reed & Co. Ltd., Larkfield, nr. Maidstone, Kent, quoting ref.. AE/17. 9092

NORTHUMBERLAND COUNTY PLANNING DEPARTMENT
LANDSCAPE ARCHITECT—Special Scale (£750—£1,030)

Applications are invited from qualified Landscape Architects. Forms and information from County Planning Officer, County Hall, Newcastle upon Tyne, 1. Closing date: 2nd April, 1958. 9054

BOROUGH OF BEXLEY
ARCHITECTURAL ASSISTANT

Applications are invited for this appointment at a salary within Grade A.P.T. I (£575—£725), plus London weighting.

Preference will be given to candidates who have passed the Intermediate Examination of the R.I.B.A. and have had experience in housing and other building projects.

Forms of application and conditions of appointment are obtainable from the Borough Engineer, West Lodge, Broadway, Bexleyheath, Kent, to whom completed applications must be returned by 21st April, 1958. The Council may be prepared to assist in the provision of housing accommodation. Canvassing will disqualify.

ARTHUR GOLDFINCH,
Town Clerk. 9078

NORTH WEST METROPOLITAN REGIONAL HOSPITAL BOARD

SURVEYING ASSISTANT required in the Architect's Department. Salary within the scale £525 to £730, plus £20—£30 London weighting.

Candidates should have passed the Intermediate Examination of the R.I.C.S. (IIB), and be competent specification writers and able to prepare working drawings for alteration works. The work is varied and interesting, and the Board operates a scheme of financial assistance to students studying for professional examinations. Office at present near Kingsway, but moving to new offices near Paddington Station later this year.

Apply, stating age, qualifications and experience, and giving names of two referees, to Secretary, North West Metropolitan Regional Hospital Board, 11a, Portland Place, W.1, by 8th April, quoting reference 628. 9046

MIDLANDS ELECTRICITY BOARD

ARCHITECTURAL DRAUGHTSMAN required on the Chief Engineer's staff at Board Headquarters.

Duties will involve (under supervision) site surveys, preparation of site layouts, sketch plans, detail and working drawings for office blocks, stores, workshops, garages, substations and Service Centre buildings. Intermediate R.I.B.A. an advantage.

Salary £760—£860 per annum (N.J.B. Schedule "D," Grade 5). Superannuable.

Apply, by letter, within 14 days, stating age, experience, present salary and position, to The Secretary (Ref. FWC), Midlands Electricity Board, Mucklow Hill, Halesowen, near Birmingham.

A. STEPHENS,
Secretary. 9080

CITY OF BRADFORD
TOWN PLANNING ASSISTANTS

Applications are invited for the following superannuable appointments in the City Engineer and Surveyor's Department on the grades indicated. Commencing salary will be in accordance with experience and qualifications.

(*a*) TWO SENIOR TOWN PLANNING ASSISTANTS. Posts 8 and 30. Special Grade (£750 × £40—£1,030).

(*b*) SENIOR TOWN PLANNING ASSISTANT. Post 14. Special Grade (£750 × £40—£1,030).

The successful candidates for (*a*) will be required in connection with the layout of large Corporation Housing Estates and schemes of development as the result of slum clearance.

Candidates for (*b*) should have experience in dealing with applications for development for new housing, industrial and commercial building and advertisement control.

Applicants should be either A.M.T.P.I., A.R.I.B.A., A.M.I.Mun.E., or A.M.I.C.E. Housing accommodation cannot be provided by the Corporation.

Applications on forms to be obtained from the City Engineer and Surveyor, Town Hall, Bradford, 1 (quoting post number), together with three testimonials, must be received by the undersigned by 21st April, 1958.

W. H. LEATHEM,
Town Clerk.

Town Hall, Bradford, 1. 9047

NORTH WEST METROPOLITAN REGIONAL HOSPITAL BOARD

ASSISTANT ARCHITECT required. Good experience of design and construction necessary, preferably in hospital work. Applicants must be Associate Members of the R.I.B.A.

Salary scale £700 × £25 (3) × £30 (1) × £35 (6)—£1,015, plus £20—£50 London weighting. Commencing salary above minimum may be paid according to relevant practical experience appropriate to the post. Whitley Council conditions, superannuable.

Apply, stating age, qualifications (with date) and experience, with the names of two referees, to Secretary, North West Metropolitan Regional Hospital Board, 11a, Portland Place, W.1, by 8th April. 9077

MONMOUTHSHIRE COUNTY COUNCIL
APPOINTMENT OF ARCHITECTURAL STAFF

Applications are invited for the following posts in the County Architect's Department under the N.J.C. Conditions as follows:—

THREE ARCHITECTURAL ASSISTANTS. Special Grade for Architectural Assistants, at a salary from £830 to £1,030 per annum; applicants to be appointed on the grade according to ability.

ONE ARCHITECTURAL ASSISTANT. Grade A.P.T. II. Salary £725 to £845 per annum.

Applications, together with details of experience and qualifications, to be forwarded to the County Architect, Queen's Hill, Newport, Mon., not later than Wednesday, 9th April, 1958.

LANCASHIRE COUNTY COUNCIL
APPOINTMENT OF COUNTY ARCHITECT

The Lancashire County Council invite applications from Fellows or Associate Members of the Royal Institute of British Architects for the post of COUNTY ARCHITECT at a salary of £3,390 per annum rising by annual increments of £265 and £260 to a maximum of £3,915 per annum. The appointment will be subject to the provisions of the Local Government Superannuation Acts, and the successful applicant will be required to pass a medical examination.

Forms of application, together with particulars of the terms and conditions of the appointment, may be obtained from the undersigned, to whom applications should be submitted not later than the 9th May, 1958.

R. ADCOCK,
Clerk of the County Council.

County Hall,
Preston. 9007

CITY OF BRADFORD
ARCHITECTURAL ASSISTANTS

Applications are invited for the appointment of TWO ARCHITECTURAL ASSISTANTS (Posts 122 and 204) at a salary in accordance with Special Grade, £750—£1,030; commencing salary in accordance with experience and qualifications.

Candidates should have had experience in the design of houses, flats and shops and the layout of housing estates, have sound design ability and be experienced in the preparation of working and detail drawings.

Applications on forms to be obtained from the City Engineer and Surveyor, Town Hall, Bradford, 1, together with three testimonials, must be received by the undersigned by 18th April, 1958.

W. H. LEATHEM,
Town Clerk.

Town Hall, Bradford, 1. 9083

GOVERNMENT OF NORTHERN IRELAND
ASSISTANT ARCHITECT CLASS II

Applications are invited for pensionable posts in the Chief Architect's Branch, Ministry of Finance. Candidates must be Registered Architects by examination, with at least 2 years' experience in an Architect's Office in the preparation of working drawings. Salary scale £780 (at age 25)—£1,055 (age 34 and over)—£1,215. Transfer of existing Pension rights may, in certain circumstances, be approved. Preference will be given to ex-Servicemen. Application forms may be obtained from the Secretary, Civil Service Commission, Stormont, Belfast. 9094

DERBYSHIRE COUNTY COUNCIL
COUNTY ARCHITECT'S DEPARTMENT

A vacancy occurs for a CHIEF ASSISTANT HEATING ENGINEER. Salary £1,175×£50 to £1,325 per annum. Applicants must (*a*) be Corporate Members of the Institute of Heating and Ventilating Engineers; (*b*) have a wide and varied experience of heating and ventilating; (*c*) have first-class administrative ability and (*d*) be good draughtsmen. Offices moving shortly to Matlock. National Joint Council Conditions of Service. Pensionable post. Canvassing disqualifies. Application Forms from The County Architect, County Offices, St. Mary's Gate, Derby. 9081

DERBYSHIRE COUNTY COUNCIL
COUNTY ARCHITECT'S DEPARTMENT

A vacancy exists for a SENIOR ASSISTANT ARCHITECT. Salary £1,025×£50 to £1,175 per annum. Applicants must be fully qualified. Offices moving shortly to Matlock. National Joint Council Conditions of Service. Pensionable post. Canvassing disqualifies. Application Forms from The County Architect, County Offices, St. Mary's Gate, Derby. 9079

BOROUGH OF OLDBURY
APPOINTMENT OF
CHIEF ARCHITECTURAL ASSISTANT

Applications are invited for the above appointment in the Borough Engineer and Surveyor's Department. Salary Grade A.P.T. 4 (£1,025/£50/£1,175) per annum.

Candidates must be Associates of the R.I.B.A., have high ability in design and be capable of preparing and supervising schemes of construction connected with Housing, Public buildings, and School Maintenance and Minor Improvement Works. Previous experience with a Local Authority is desirable.

The appointment will be superannuable, subject to the National Conditions of Service and to the selected candidate passing a medical examination.

Applications, giving particulars of age, qualifications and experience and the names of two referees, should be delivered to the undersigned not later than Monday, 14th April, 1958. Canvassing will disqualify.

KENNETH PEARCE,
Town Clerk.

Municipal Buildings,
Oldbury.
March, 1958. 9093

NORTH WEST METROPOLITAN REGIONAL HOSPITAL BOARD
SENIOR ASSISTANT QUANTITY SURVEYOR

Applications are invited from Corporate Members of the R.I.C.S. (Quantities Section) for the appointment of SENIOR ASSISTANT QUANTITY SURVEYOR, to specialise in estimating and cost analysis for major works. Requires wide general experience, sound knowledge of economics of modern building techniques, and ability to supervise staff. Salary scale: £1,010 × £30 (5) ×£35—£1,195 p.a., plus London weighting.

Apply, stating age, qualifications, experience, and names of two referees, to Secretary, North West Metropolitan Regional Hospital Board, 11a, Portland Place, W.1, by 8th April. 9082

LONDON COUNTY COUNCIL
ARCHITECT'S DEPARTMENT

Vacancies for (1) ARCHITECTS, Grade III, starting salary up to £1,090 a year. (2) ARCHITECTURAL ASSISTANTS, starting salary up to £860.

Full and interesting programme of houses, flats, schools and general buildings.

Application form and full particulars from the Architect (AR/EK/5/58), The County Hall, S.E.1. (203) 8741

Architectural Appointments Vacant

4 lines or under, 9s. 6d.; each additional line, 2s. 6d. Box Number, including forwarding replies, 2s. extra

CO-OPERATIVE WHOLESALE SOCIETY LTD. ARCHITECT'S DEPARTMENT, MANCHESTER

APPLICATIONS are invited for the appointment of ASSISTANT ARCHITECTS with experience of work on commercial and industrial projects, capable of preparing working drawings from preliminary details. Five-day week in operation. Applications stating age, experience, qualifications and salary required to G. S. Hay, A.R.I.B.A., Chief Architect, Manchester 4. 8276

BRIGHTON AND HOVE. SENIOR ASSISTANT required for small progressive office. Details to Box 8965.

SMALL country practice requires inter. standard ASSISTANT. Starting salary about £400. Unfurnished flat available. Previous experience unimportant, but applicants *must* be conscientious and quick to learn. Send full personal particulars to Alec H. Joy, A.R.I.B.A., Victoria Place, Kingsbridge, Devon. 8974

ARCHITECTURAL ASSISTANTS required in busy London Office with varied practice. Good salary and prospects for suitable applicants. Five-day week. Write giving particulars of age, qualifications, experience, etc., to Box 873, c/o 7, Coptic Street, W.C.1. 8941

MANCHESTER Architect with small but busy practice requires SENIOR or NEAR SENIOR ASSISTANT. A good opportunity for man willing to work hard and who is enthusiastic about architecture and building. Box 9084.

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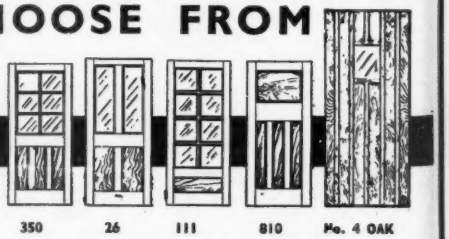

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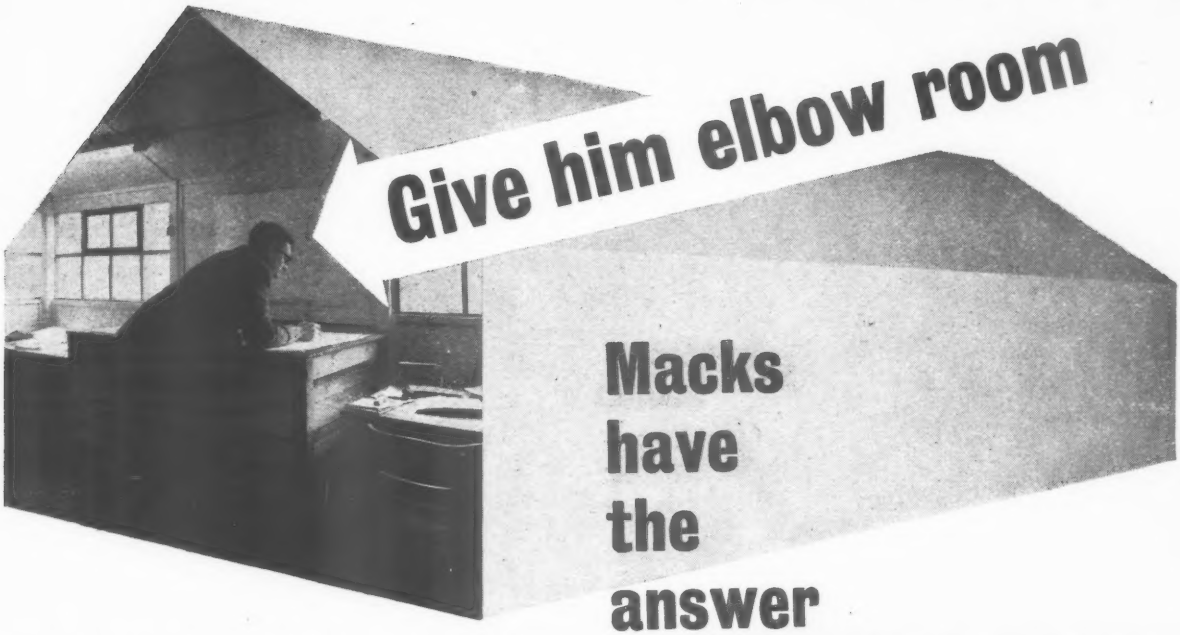

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